Contra Costa Community College District

Governing Board
Vicki Gordon .............................................................................. President
Greg Enholm ................................................................................ Vice President
Tim Farley ..................................................................................... Secretary
John E. Márquez ........................................................................... Member
John T. Nejedly ............................................................................... Member
TBA ............................................................................................... Student Trustee

District Administration
Dr. Helen Benjamin, Chancellor

Colleges
Los Medanos College, Contra Costa College, Diablo Valley College

Los Medanos College Administration
President ................................................................. Bob Kratochvil
Vice President, Instruction & Student Services .................................... Kevin Horan
Dean of Instruction, Career-Technical Education & Social Sciences ........ Natalie Hannum
Director, Early Childhood Lab School .................................................. Kathryn Nielsen
Program Manager, Workforce & Economic Development ......................... David Wahl
Dean of Instruction, Liberal Arts .......................................................... Nancy Ybarra
Dean of Instruction, Mathematics & Sciences ............................................ A'kilah Moore
Office of Instruction Supervisor .......................................................... Eileen Valenzuela
Senior Dean, Student Services & Brentwood Center ................................ Gail Newman
Dean, Counseling & Student Support .................................................... Jeffrey Benford
Assistant Director, EOPS/CARE .......................................................... Steven Freeman, Jr.
Director, Student Retention & Support Services ........................................ Teresea Archaga
Manager, Disability Support Services ..................................................... Virginia Richards
Dean, Student Success ........................................................................ David Belman
Director, Transfer & Career Services ..................................................... Kristin Conner
Manager, Student Outreach ................................................................. Jorge Cea
Bookstore Manager ............................................................................ Robert Estrada
Director, Admissions & Records ............................................................ Robin Armour
Director, Student Success & Support Program (Interim) ............................. Carla Rosas
Financial Aid Supervisor .................................................................... Jennifer Ma
Senior Dean, Planning & Institutional Effectiveness ................................... Vacant
Dean, Institutional Equity & Advancement (Interim) ................................. Ruth Goodin
Director, Business Services .................................................................. Aderonke Olatunji
Buildings & Grounds Manager ................................................................ Russ Holt
Custodial Manager ............................................................................. Barry Edwards
Technology Systems Manager .............................................................. Mike Becker
Director, Marketing & Media Design ....................................................... Barbara Cella
Lieutenant, Police Services ................................................................... Ryan Huddleston
2016-2017 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, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Accrediting Commission for Community and Junior Colleges
10 Commercial Boulevard, Suite 204
Novato, CA 94949
(415) 506-0234
www.accjc.org

Approved by
Board of Governors of the California 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 Fire Marshal
Commission on Peace Officer Standards and Training
Contra Costa County Emergency Medical Services Office
State Board of Registered Nursing
State Board of Vocational Nursing

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 other formats easily accessible by persons with disabilities. For information, contact the Alternative Media Specialist at (925) 473-7848 or TDD (925) 439-5709.

Telephone
Pittsburg Campus (925) 439-2181
Bookstore (925) 439-2056
Brentwood Center (925) 513-1625
TDD (925) 439-5709
# Table of Contents

## Section 1: General Information

- About the College .......................................................... 8
- Admission and Course Enrollment .................................... 9
  - College Admission
  - Residency Status
  - International Students
  - Matriculation and Course Enrollment
  - Prerequisites/Advisories
  - Non-Discrimination Policy

## Standards of Scholarship .................................................. 13

- Attendance
- Grading
- Honors Status
- Pass/No Pass Grade Option
- Withdrawal and Drop Policy
- Probation and Dismissal
- Credit Accepted at Los Medanos College
- High School Credit
- Policies and Procedures for Repeating a Course Taken in the District
- Academic Renewal Without Course Repetition
- Transcripts
- Rights of Instructors

## Fees, Benefits and Financial Aid .......................................... 22

- Enrollment Fee
- Tuition Fee for Non-California Residents
- Refund Policy
- Parking Fees
- Veterans Benefits
- Extended Opportunity Programs & Services
- Vocational Rehabilitation
- Financial Aid

## Student Services ............................................................ 27

- Admissions & Records
- Assessment Center
- Bookstore
- Business Services Office
- Career Services
- Child Care Services
- Counseling Services
- Disabled Students Program and Services
- Food Service
- Health Services Referral
- InSite and InSite Mail (student email)
- Parking Regulations
- Police Services
- Gay and Lesbian Resource Center
- Student Life
- Transfer & Career Services
- Veterans Resource Center

## Instructional Services ...................................................... 34

- Athletics
- Center for Academic Support
- Cooperative Work Experience Education
- Drop-In Computer Lab
- Honors Program
- Information Technology & Services
- Library
- Math Lab
- Media Services
- MESA
- Puente
- Student Newspaper—The Experience
- Umoja Scholars
Student Rights & Responsibilities .................................................. 37
  Academic Freedom
  Student Participation in Institutional Governance
  Student Responsibilities and Educational Goals
  Off-Campus Activities
  Progress Evaluation by Faculty
  Grievance/Complaint Process
  Student Code of Conduct
  Student Discipline and Suspension
  Drug-Free Campus Policy
  Smoking Policy
  Matriculation Rights and Responsibilities
  Matriculation Waivers, Appeals, and Complaints
  Student Records Privacy Law
  Student Right-To-Know and Campus Security Act

Section 2: College Transfer and Graduation Requirements

Transfer Information ................................................................. 50
  CSU Admission Requirements
  UC Admission Requirements
  Special Transfer Admissions Programs and Cooperative Admissions Program
  Intersegmental General Education (CSU and UC)
  Private Colleges and Universities (California and Nationwide)

CSU General Education Requirements Chart ................................ 54
IGETC Requirements Chart ....................................................... 55

Section 3: Program Requirements, Courses and Program Student Learning Outcomes

Graduation Requirements .......................................................... 58
  Applying for Graduation
  Catalog Rights
  Associate Degree for Transfer Requirements
  Associate Degree Requirements
  Certificate of Achievement Requirements
  College Skills Certificate Requirements

General Education ................................................................. 59
Student Planning ................................................................. 60

Degrees and Certificates in Major Programs ................................ 61

Pathways to an Associate Degree at LMC .................................... 62

Associate Degree General Education Requirements .................. 63

Understanding the Course Descriptions .................................... 64
Guidelines on Units of Credits ................................................. 65

Reading Course Descriptions .................................................. 66

Course Descriptions, Program Descriptions, and Program Student Learning Outcomes ........................................ 67

Section 4: Appendices

Faculty/Staff ........................................................................... 262
Catalog Acknowledgement ...................................................... 269
Phone Directory ........................................................................ 270
Glossary of Terms .................................................................... 271
Index ...................................................................................... 276
College Calendar

Summer Intersession 2016

Instruction begins .................................................. May 31
Independence Day—Legal Holiday .......................... July 4
Last day to apply for Summer graduation .................. July 5
End of Summer Intersession .................................. Aug 11

Fall Semester 2016

Begin accepting applications for Fall Semester .............. Feb 15
Course enrollment .................................................. See Fall Schedule of Courses
Instruction begins .................................................. Aug 12
Last day to add and drop full term classes with eligibility for fee refund or credit ............ Aug 25
Last day to drop for semester-length courses to avoid “W” on transcript if dropping in person ... Sept 2
Labor Day—Legal Holiday .......................................... Sept 5
Last day to drop for semester-length courses to avoid “W” on transcript if dropping on WebAdvisor .................. Sept 5
Last day to petition for pass/no pass option (SC) for semester-length courses .............. Sept 9
Native American Day—Holiday .................................. Sept 23
Last day to apply for Fall graduation ......................... Oct 3
Veterans Day—Legal Holiday .................................... Nov 11
Last day to drop semester-length courses .................... Nov 18
Thanksgiving—Legal and Board Holidays .................. Nov 24 – Nov 26
Last day of instruction and final exams ......................... Dec 16

Spring Semester 2017

Begin accepting applications for Spring Semester ........... Sept 15
Course enrollment .................................................. See Spring Schedule of Courses
Martin Luther King Jr.’s Birthday—Board Holiday .......... Jan 16
Instruction begins .................................................. Jan 21
Last day to add full term classes ................................. Feb 3
Last day to drop full term classes with eligibility for fee refund or credit ................. Feb 3
Last day to drop for semester-length courses to avoid “W” on transcript if dropping in person .......... Feb 3
Last day to drop for semester-length courses to avoid “W” on transcript if dropping on WebAdvisor .................. Feb 5
Last day to petition for pass/no pass option (SC) for semester-length courses ........ Feb 16
Lincoln’s Birthday—Legal Holiday ............................ Feb 17
Washington’s Birthday—Legal Holiday ...................... Feb 20
Last day to apply for Spring graduation ..................... March 1
Spring recess .......................................................... April 3 – 8
Last day to drop for semester-length courses ................ April 29
Last day of instruction—Graduation ......................... May 29
Memorial Day—Legal Holiday ................................. May 29
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 four-year 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.
Accreditation Information
Los Medanos College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC), and was last reaffirmed for accreditation in January 2015.

Accreditation provides assurance to the public that colleges meet the quality and effectiveness standards for a degree-granting institution of higher education. It also includes the college among those eligible for Title IV student financial aid.

Institutions complete a self-evaluation process every six years in order to have their accreditation status re-affirmed by ACCJC. The process includes internal and external evaluations of the college’s performance, as defined by the ACCJC standards for:
- Institutional Mission and Effectiveness
- Student Learning Programs and Services
- Resources
- Leadership and Governance

Additional information about LMC’s accreditation status and process is available online at: www.losmedanos.edu/accreditation/

Los Medanos College Foundation
The Los Medanos College Foundation Board of Directors and staff team are committed to raising financial support that ensures student success for Los Medanos College students. We know that successful students achieve their educational goals, which in turn, strengthens the community for us all.

The LMC Foundation fulfills its mission with the support of our generous corporate, foundation, and individual partners whose financial contributions change lives through student scholarships, student success programs, career and technical education, instructional supplies and facilities, and more.

You can become our partner to ensure student success!
The LMC Foundation is a non-profit 501 (c) (3) charitable organization and as such, your contribution is tax deductible to the extent provided by law. Visit our website or call today to learn about your opportunity to become a champion for student success.

Los Medanos College Foundation
www.losmedanos.edu/foundation
foundation@losmedanos.edu
(925) 473-7315

Together we build futures and change the lives of Los Medanos College students.

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 a Special Admit Introduction 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 a Special Admit Introduction and an Age Waiver Form and request approval from a 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. Los Medanos College has authorization under federal law to enroll nonimmigrant students.

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. Health insurance fees will automatically be charged each semester when you register for courses.
5. International students must pay a nonresident tuition fee, in addition to enrollment fees.
6. 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 September 15.
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 Welcome Center.
3. Registration is set up on a priority system (see Course Enrollment Priority) and must be completed online.
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 and Student Planning. Detailed instructions for the use of this system can be found on the college website 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 Pittsburg Campus and at the Brentwood Center. It is also available for students who need to have prerequisites cleared 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 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.

*Prerequisites coursework will only be considered from regionally accredited institutions.

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 California Code of Regulations, Title 5, 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
Most of the courses LMC offers are scheduled for weekdays, and during both daytime and evening hours. The College also provides weekend and online courses. Short-term classes are offered, and may start at various times throughout a semester.

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 to a four-year university.

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.
General Information

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
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 regarding compliance and/or grievance procedures may be directed to the Los Medanos College Title IX Officer and Section 504/ADA Coordinator:

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.

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 complaining 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.

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.

Reíglamento de no discriminación
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 proced-
imientos 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 Título 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
cabe 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
Preguntas en cuanto al acceso, tratamiento o empleo a base
de incapacidad, deben ser dirigidas al Decano Servicios
Estudiantiles De El Colegio Los Medanos, 2700 East Leland Rd.,
Pittsburg, CA 94565, (925) 473-7421, o
TDD (925) 439-5709.

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

Attendance
Students are expected to be punctual and attend all courses
in which they are enrolled. Students may be dropped by
the instructor for failure to attend class in the following
circumstances:
1. Failure to attend first class meeting
2. Absence from 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) incompetence. (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**

**Honors Status & Dean's List**

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

**Graduation with Honors**

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

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

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

Permanent AGS status is achieved by maintaining active involvement in our chapter and a high GPA. Permanent membership is noted on the student’s official college transcript. For further information, contact the AGS Advisor.

### Evaluative Symbols/Grading Scale

<table>
<thead>
<tr>
<th>SYMBOL AND DEFINITION</th>
<th>GRADE POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B  Good</td>
<td>3</td>
</tr>
<tr>
<td>C  Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D  Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F  Failing</td>
<td>0</td>
</tr>
<tr>
<td>P  Passing (at least satisfactory — C or better — units awarded not counted in GPA).</td>
<td></td>
</tr>
<tr>
<td>NP  No Pass (less than satisfactory or failing — units not counted in GPA).</td>
<td></td>
</tr>
</tbody>
</table>

**Pass/No Pass Grade Option**

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

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

In order to exercise this option, a petition must be filed with the Admissions & Records Office 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

1. 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 its 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 75% of the term or course. 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% 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. Non-attendance 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.

Withdrawals
- Students who have documented extenuating circumstances such as accidents, illness or other situations beyond the control of the student, may apply for a withdrawal after 75% 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.

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 2.0 or higher.

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

Reinstatement for Academic or Progress Probation II
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 II must:
1. Attend a Probation II Workshop
2. Provide the Student Retention and Support Services office an “Academic Progress Report”
3. Maintain a semester GPA of 2.0 with no grades below a C (including no W, I, NP, NC)
4. Complete 100% of the units attempted.

Students who have been approved for enrollment during the current term and who have fulfilled their semester obligations will be allowed to register for the next semester. Students with Probation II academic/progress standing who do not attend a Probation II workshop will be prohibited from enrolling for classes at all Contra Costa Community College District campuses, Diablo Valley, Contra Costa and Los Medanos Colleges.

Reinstatement for Academic or Progress Dismissal
Students will receive a letter of notification through campus email indicating that they have been dismissed from the Contra Costa Community College District. A student may appeal his/her dismissal status by attending a Reinstatement Workshop and following the steps outlined during a Reinstatement Workshop. Students must schedule their workshop online at the counseling webpage: www.losmedanos.edu/counseling/workshops. The Office of Student Retention & Support Services will review all appeals for possible reinstatement. If reinstated, a student is subject to continued probation and dismissal policies, as noted above.
Credit Accepted at Los Medanos College

Other College
Los Medanos College accepts credit from institutions accredited by one of the five regional accrediting associations or follows the recommendation of the American Association of Collegiate Registrars and Admissions Officers. Transcripts are evaluated when the student 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 Through High School Articulation
Los Medanos College will grant college credit for courses formally articulated with area high schools in occupation/career areas where articulation agreements have been signed between high schools and Los Medanos College. Upon enrolling at Los Medanos College, students who have met the specific conditions of the articulation agreement may petition through the Office of Admissions and Records. The students’ high school instructors will provide agreed upon eligibility information for the college credit. The forms necessary to petition for credit are available at www.losmedanos.edu/admissions/forms.asp

Students taking articulated courses in high school are encouraged to meet with an LMC counselor to establish an educational plan. For more information, visit: www.losmedanos.edu/studentservices/counseling/online.asp
For a list of currently articulated high school courses, visit: www.losmedanos.edu/cte/articulations.asp
### Advanced Placement

<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>3.45</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>3.45</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>3.45</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>3.45</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</td>
<td>3.45</td>
<td>COMSC 44 or 122 3 units</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>6**</td>
<td>N/A</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>3.45</td>
<td>COMSC 44 + 48 - 6 units or COMC 122 + 132 - 6 units</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>6**</td>
</tr>
<tr>
<td>Economics: Macro</td>
<td>3.45</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>3.45</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>3.45</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>3.45</td>
<td>ENGL 100 - 3 units</td>
<td>English Composition</td>
<td>6 units Area A2&amp;C2</td>
<td>6</td>
<td>1A or 3B</td>
<td>5.3</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>3.45</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>3.45</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>3.45</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>3.45</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. Govt. &amp; Politics: Comparative</td>
<td>3.45</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>3.45</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>3.45</td>
<td>HIST 29 + 30 - 6 units</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: European History</td>
<td>3.45</td>
<td>No equivalent-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>3.45</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: World</td>
<td>3.45</td>
<td>HIST 34 + 35 - 60 units</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>3.45</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>3.45</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>Japanese Language &amp; Culture</td>
<td>3.45</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>Latin: Vergil</td>
<td>3.45</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>Latin: Literature</td>
<td>3.45</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>Mathematics: Calculus AB</td>
<td>3.45</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>Mathematics: Calculus AB</td>
<td>3.45</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>Mathematics: Calculus AB</td>
<td>3.45</td>
<td>MATH 50 - 4 units</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>Mathematics: Calculus AB</td>
<td>3.45</td>
<td>MATH 50 + 60 - 8 units</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>Music Theory</td>
<td>3.45</td>
<td>Music 15 - 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C1</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Music Theory</td>
<td>3.45</td>
<td>Music 15 + 16 - 6 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C1</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Physics B</td>
<td>3.45</td>
<td>PHYS 25 + 36 - 8 units</td>
<td>N/A</td>
<td>4 units Area B1&amp;B3</td>
<td>6</td>
<td>5A with lab</td>
<td>2.7</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>3.45</td>
<td>PHYS 40 - 4 units</td>
<td>N/A</td>
<td>4 units Area B1&amp;B3</td>
<td>6</td>
<td>5A with lab</td>
<td>2.7</td>
</tr>
<tr>
<td>Physics C: Magnetism</td>
<td>3.45</td>
<td>PHYS 41 - 4 units</td>
<td>N/A</td>
<td>4 units Area B1&amp;B3</td>
<td>6</td>
<td>5A with lab</td>
<td>2.7</td>
</tr>
<tr>
<td>Psychology</td>
<td>3.45</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>2.7</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>3.45</td>
<td>SPAN 2 - 5 units</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>Spanish Language</td>
<td>3.45</td>
<td>SPAN 53 - 5 units</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>Statistics</td>
<td>3.45</td>
<td>MATH 34-4 units</td>
<td>Communication &amp; Analytical Thinking</td>
<td>3 units Area B4</td>
<td>3</td>
<td>2A</td>
<td>2.7</td>
</tr>
</tbody>
</table>

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

* If test was taken in Fall 2009 or earlier, credits may apply to either B1& B3 or B2 & B3.
** If more than one exam passed in physics, maximum of four units for CSU GE, six units for UC.
*** If more than one exam passed in physics, maximum of four units for CSU GE, six units for UC.
**** Partially fulfills the American History & Institutions requirement. California government requirement can be fulfilled after transfer.
***** If taken prior to Fall 2009.
## College Level Examination Program

<table>
<thead>
<tr>
<th>CLEP EXAMINATION</th>
<th>SCORE</th>
<th>LMC COURSE EQUIVALENTS</th>
<th>SEMESTER UNITS TOWARD CSU GE/BREADTH AREA CERTIFICATION</th>
<th>IGETC AREA CREDIT ALLOWED</th>
<th>UC SEMESTER UNITS FOR TRANSFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area D8</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>American Literature</td>
<td>50</td>
<td>Elective credit – 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C2</td>
<td>N/A</td>
</tr>
<tr>
<td>An. &amp; Interpreting Literature</td>
<td>50</td>
<td>Elective credit – 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C2</td>
<td>N/A</td>
</tr>
<tr>
<td>Biology</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B2</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Calculus</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>50</td>
<td>CHEM 6 - 4 units</td>
<td>3 units Area B1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>College Algebra-Trigonometry</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>College Mathematics</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>English Composition - no essay</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>English Composition - essay</td>
<td>50</td>
<td>Eligible for ENGL 100</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>English Literature</td>
<td>50</td>
<td>Elective – 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C2</td>
<td>N/A</td>
</tr>
<tr>
<td>Financial Accounting</td>
<td>50</td>
<td>No Equivalent – N/A</td>
<td>0 units N/A</td>
<td>3 units</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level I</td>
<td>50</td>
<td>FRENCH 6 – 5 units</td>
<td>0 units N/A</td>
<td>6 units</td>
<td>N/A</td>
</tr>
<tr>
<td>French Level II</td>
<td>50</td>
<td>FRENCH 61 – 5 units</td>
<td>3 units Area C2</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Freshman College Composition</td>
<td>50</td>
<td>Eligible for ENGL 100</td>
<td>0 units N/A</td>
<td>0 units</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level I</td>
<td>50</td>
<td>Elective credit – 5 units</td>
<td>0 units N/A</td>
<td>6 units</td>
<td>N/A</td>
</tr>
<tr>
<td>German Level II</td>
<td>60</td>
<td>Elective credit – 5 units</td>
<td>3 units Area C2</td>
<td>12 units</td>
<td>N/A</td>
</tr>
<tr>
<td>History, U.S. I</td>
<td>50</td>
<td>HIST 29 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D6 &amp; US1</td>
<td>3 units Area D6 &amp; US1</td>
</tr>
<tr>
<td>History, U.S. II</td>
<td>50</td>
<td>HIST 30 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D6 &amp; US1</td>
<td>3 units Area D6 &amp; US1</td>
</tr>
<tr>
<td>Human Growth &amp; Development</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area E</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>Elective credit – 3 units</td>
<td>Arts &amp; Humanities</td>
<td>3 units Area C2</td>
<td>N/A</td>
</tr>
<tr>
<td>Info Sys &amp; Comp Applications</td>
<td>50</td>
<td>COMSC 40 – 4 units</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Intro Educational Psychology</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>3 units</td>
<td>N/A</td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Introductory Psychology</td>
<td>50</td>
<td>PSYCH 10 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D9</td>
<td>3 units Area D9</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>50</td>
<td>SOCIO 15 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D10</td>
<td>3 units Area D10</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B1 or B2</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Accounting</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>3 units</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>ECON 11 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D2</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Marketing</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>50</td>
<td>ECON 10 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D2</td>
<td>N/A</td>
</tr>
<tr>
<td>Social Sciences &amp; History</td>
<td>50</td>
<td>No Equivalent – N/A</td>
<td>0 units N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level I</td>
<td>50</td>
<td>SPAN 50 – 5 units</td>
<td>0 units N/A</td>
<td>6 units</td>
<td>N/A</td>
</tr>
<tr>
<td>Spanish Level II</td>
<td>63</td>
<td>SPAN 51 – 5 units</td>
<td>3 units Area C2</td>
<td>12 units</td>
<td>N/A</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>50</td>
<td>No equivalent – N/A</td>
<td>3 units Area B4</td>
<td>3 units</td>
<td>N/A</td>
</tr>
<tr>
<td>Western Civilization I</td>
<td>50</td>
<td>HIST 34 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area C2 or D6</td>
<td>N/A</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>50</td>
<td>HIST 35 – 3 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D6</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### General Information

**International Baccalaureate Examination**

<table>
<thead>
<tr>
<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>
<th>UC SEMESTER UNITS FOR TRANSFER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology HL</td>
<td>5,6,7</td>
<td>No equivalent – N/A</td>
<td>N/A</td>
<td>3 units Area B2</td>
<td>6</td>
<td>5B no lab</td>
<td>5.3</td>
</tr>
<tr>
<td>Chemistry HL</td>
<td>5,6,7</td>
<td>CHEM 25 – 5 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>Economics HL</td>
<td>5,6,7</td>
<td>ECON 10 + 11 – 6 units</td>
<td>Social &amp; Behavioral Science</td>
<td>3 units Area D2</td>
<td>6</td>
<td>4B</td>
<td>5.3</td>
</tr>
<tr>
<td>Geography HL</td>
<td>5,6,7</td>
<td>No equivalent – N/A</td>
<td>N/A</td>
<td>3 units Area D5</td>
<td>6</td>
<td>4E</td>
<td>5.3</td>
</tr>
<tr>
<td>History (any region) HL</td>
<td>5,6,7</td>
<td>No equivalent – N/A</td>
<td>N/A</td>
<td>3 units Area C2 or D6</td>
<td>6</td>
<td>3B or 4F</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A1(Any Language) HL, Language A1(French) HL, Language A1(Spanish) HL</td>
<td>4, 5, 6, 7</td>
<td>Elective credit – 6 units</td>
<td>Elective credit – 6 units</td>
<td>3 units Area C2</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A2 (Any) HL</td>
<td>4, 5, 6, 7</td>
<td>Elective credit – 6 units</td>
<td>Elective credit – 6 units</td>
<td>3 units Area C2</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Language A2(French) HL, Language A2(Spanish) HL</td>
<td>4, 5, 6, 7</td>
<td>Elective credit – 6 units</td>
<td>Elective credit – 6 units</td>
<td>3 units Area C2</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Language B (Any) HL</td>
<td>4, 5, 6, 7</td>
<td>Elective credit – 6 units</td>
<td>Elective credit – 6 units</td>
<td>3 units Area C2</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Language B(French) HL, Language B(Spanish) HL</td>
<td>4, 5, 6, 7</td>
<td>Elective credit – 6 units</td>
<td>Elective credit – 6 units</td>
<td>3 units Area C2</td>
<td>6</td>
<td>N/A</td>
<td>5.3</td>
</tr>
<tr>
<td>Mathematics HL</td>
<td>4, 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>5.3</td>
</tr>
<tr>
<td>Physics HL</td>
<td>5,6,7</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, 5, 6, 7</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>5.3</td>
</tr>
</tbody>
</table>

**Credit by Advanced Placement (AP)**

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

Students who participate in this program should indicate at the time they take the Advanced Placement Examinations that their scores be sent to Los Medanos College. To obtain credit for Advanced Placement Examinations, students should contact the Admissions & Records Office. Credit may not be earned at Los Medanos College for courses which duplicate credit already allowed for examinations as listed under course equivalents.

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

**High School Credit**

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

**Course Repetition Policy**

Courses are not repeatable unless noted within the course descriptions listed in the catalog. Students may repeat a non-repeatable course only to alleviate a substandard grade of D, F or NC/NP.

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.

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. You may only utilize Academic Renewal one time within the District.
2. Only substandard grades will be renewed.
3. You must have completed 20 units of satisfactory work that has been completed within the Contra Costa Community College District or any other accredited college or university, since receiving the last substandard grade (the unit count begins the semester after the substandard grade is received). In-Progress semesters cannot be included.
4. If you have coursework from another college, student must provide official transcript.
5. You must not have received any of the following: D, F or NC/NP, since the substandard work (minimum 2.0 since substandard work).
6. Courses that have already been removed from GPA by course repetition cannot be reversed.
7. Academic Renewal cannot be reversed.
8. There is no minimum or maximum time limit (no waiting period since the substandard work).
9. A maximum of 24 units within the district may be renewed, however each college will make their own adjustments.
10. The processing time is 2 weeks.

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. Students may request an evaluation of transcripts.

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. To obtain free copies of official verification of enrollment (24 hours a day, 7 days a week), visit: 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 an 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 Aid

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 $237 per unit, in addition to the enrollment fee of $46 per unit. The nonresident fee for non-U.S. citizens is $237 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.

Effective June 2014, students who have been given a C33 Visa (Deferred Action for Childhood Arrivals) may qualify for California residency with appropriate documentation. Please contact Admissions & Records for more information.

Concurrently enrolled students (high school students enrolled in college classes) who are classified as nonresident students for tuition purposes may be eligible for the SB150 waiver of nonresident 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. For further information inquire at the Admissions & Records Office.

Effective January 1, 2015 students may be exempt from paying nonresident tuition under AB 540 if they attained credits earned in California from a California high school equivalent to three or more years of full-time high school coursework and a total of three or more years of attendance in California elementary schools, California secondary schools, or a combination of those schools. The student must also have received a diploma or equivalent in California.

The VACA Act (Veterans Access, Choice and Accountability) was effective July 1, 2015. This act waives nonresident tuition for certain veterans and their dependents beginning Fall 2015 semester. Student veterans covered under Chapter 30 and 33 are eligible. For further information inquire at the Admissions & Records Office.

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

Student Union Fee Information

Based on a student vote in a campus election, a student union fee is required of all students (except BOG-A Fee Waiver recipients, with Cal WORKS, TANF, general assistance, and SSI). The fee is $1.00 per unit, to a maximum of $10.00 per academic year. The student union fee must be paid at the time of registration. The fee will contribute funding toward the 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 before the refund deadline. That form is available online at: www.losmedanos.edu/admissions/ActivityFeeRefundForm.pdf.
Financial Holds
A hold may be placed on a student’s record whenever that student has failed to pay any debt owed to the college or has failed to return a library book or other college property or equipment. Students with holds will not be allowed to register, receive transcripts, receive certificates or degrees, and/or receive other services related to student records. The hold will be removed once the student has cleared the obligation with the college.

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

If your debt remains unpaid, Los Medanos College may garnish your California state tax return through the state-mandated Chancellor’s Office Tax Offset Program (COTOP). In this instance a 33 1/3% administrative fee will be added to your delinquent balance. This balance will be forwarded for collection to the State Franchise Tax Board (FTB). In the event you are owed a state tax refund, win a California Lottery prize, or have unclaimed property to be distributed to you by the State of California Controller’s Office for the upcoming tax year, California State Government Code sections 12419.2, 12419.7, 12419.10, and 12419.11 authorize the Office of the State Controller and the FTB to collect money owed to individuals and redirect these funds to pay the individual’s debt owed to the agencies/colleges.

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 each semester. 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 each instruction.

No refund of the enrollment fee will be made to any student who withholds 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 Cashier’s 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 $48.00 for automobiles and $30.00 for motorcycles or mopeds for Fall or Spring semesters. Summer permits are $25.00 for automobiles and $15.00 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. Session-long permits can be purchased online through InSite/WebAdvisor, www.4cd.edu/webadvisor.

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, (Los Medanos Drive) 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 $15.00. 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 on the tenth of each month and 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 no longer printed but pay advices are now available for viewing online through WebAdvisor.
**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:

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 honorably discharged veterans.

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 chapter and 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. 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 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, (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 disadvantaged backgrounds. To qualify for EOPS, you must 1) be a California resident; 2) be enrolled full-time at LMC; 3) qualify for a Board of Governor fee waiver (BOG A or B); 4) have earned less than 70 degree-applicable units; and 5) 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 a 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 the 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 Los Medanos College Office of Financial Aid, in compliance with Titles VI and VII of the Civil Rights Act of 1964, and Title IV of the Higher Education Act of 1965, P.L. 89-329, as amended and the Rehabilitation Act of 1973, does not discriminate on the basis of race, creed, color, national origin, mental or physical handicaps, age, or sex in any of its policies, practices or procedures.

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

There are three types of financial aid:
- Grants – awards that a student does not have to repay unless student drops all classes before completing 60% of the semester 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 home school certificate.
- Not be in default on a Federal student loan or owe a repayment on a Federal grant.
- Be registered with Selective Service (male students).

**How to Apply for Financial Aid**
All students are encouraged to apply for all forms of Federal and State financial aid programs offered at Los Medanos College by completing the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov.

The FAFSA should be completed beginning October 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 Fee Waiver (BOGW) which waives or refunds your enrollment fees (assuming you are a California resident). You do not have to file a separate BOGW application.
4. If you want only your fees paid or refunded, you can complete the shorter Board of Governors Fee Waiver (BOGW) form online using OpenCCC, www.losmedanos.edu/financialaid/apps.asp. Next, click on “BOGW Application”.

State financial aid programs are available to AB540 students. AB540 students are encouraged to complete the California Dream Act application online at dream.csac.ca.gov.

**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 or Dream Act application 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 2016-2017 academic year:

<table>
<thead>
<tr>
<th>Family Size</th>
<th>2015 Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$17,655</td>
</tr>
<tr>
<td>2</td>
<td>$23,895</td>
</tr>
<tr>
<td>3</td>
<td>$30,135</td>
</tr>
<tr>
<td>4</td>
<td>$36,375</td>
</tr>
<tr>
<td>5</td>
<td>$42,615</td>
</tr>
<tr>
<td>6</td>
<td>$48,855</td>
</tr>
<tr>
<td>7</td>
<td>$55,095</td>
</tr>
<tr>
<td>8</td>
<td>$61,335</td>
</tr>
</tbody>
</table>

Each Additional Family Member: $6,240
All amounts subject to change.
BOGW – C:
You have completed the Free Application for Federal Student Aid (FAFSA) and you have “Financial Need” as defined by the Department of Education located on your Student Aid Report.

BOGW – F:
You must have certification from the California Department of Veteran Affairs.

Beginning with the Fall 2016 semester, there will be minimum academic progress standards that must be met for continued eligibility for the BOGW.

- Academic standards: sustain a cumulative GPA of 2.0 or higher
- Progress standards: cumulative satisfactory completion of more that 50% of all coursework attempted.

Students with extenuating circumstances will be given an opportunity to appeal.

Other Federal and State financial aid programs available at Los Medanos College:
- Federal Supplemental Educational Opportunity Grant
- Federal Pell Grant
- Federal Work-Study
- Federal Direct Loans (Subsidized and Unsubsidized)
- Full Time Student Success Grant
- Cal Grant B
- Cal Grant C
- California Chafee Grant

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

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

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

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

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

Suspension
If the student is placed on 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.

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

Financial Aid Appeals
A student who is suspended from financial aid may have their eligibility reinstated. If a student feels he/she has unusual or 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 Appeal Committee. If approved, a student will be placed on probation for that semester. At the discretion of the Appeal Committee, students who have met minimum academic requirements of the SAP policy while in Financial Aid probation for the previous semester, may be reconsidered for automatic continuance of their “probation” status for the current semester.

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

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

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

Financial Aid Disbursement
If you have a Federal Work-Study job, you will receive a monthly pay check for the hours you work. Contra Costa Community College District offices will mail out Student’s Financial Aid Disbursement Checks, according to the agreed upon District-wide Financial Aid Processing Schedule. Students can also select ACH Transfer (direct deposit) or a Money Network enabled college cash card as their funding option.
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.

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

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

$1,000 grant x 26% – $260 earned
$1,000 grant x 74% – $740 unearned

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

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

Students Rights and Responsibilities

Students Have the Right to Ask the College:

• What it costs to attend and what are the refund policies 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 extenuating circumstances.
• 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.
• 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 provides English and math placements based on transcript evaluation, results from previously administered placement tests, or by taking the Los Medanos College assessment. An assessment is required for all students who plan to earn an associate degree, to transfer to a four-year college, or to enroll in certain courses with prerequisites. Transcripts can be submitted to the Admission & Records Office and placement test scores from other colleges can be brought to the Assessment Center. The college placement test is administered in the Assessment Center at the Pittsburg Campus or at the Brentwood Center and is available by appointment during the scheduled testing hours.

Bookstore
www.lmcbookstore.net
(925) 439-2056
The LMC Bookstore is a self-supporting, institutionally owned enterprise. Bookstore profits are used for the general benefit of the student body, as determined by the governing board. 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 1,000 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 50% 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 and 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 throughout the Pittsburg Campus. 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. Postings will also be forwarded for posting at the Brentwood Center.

Career Services – see Transfer & Career Services

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 institutions
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 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 all 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: monetary grants, book voucher, parking permits, counseling 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 two 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) 473-7481
A component of the EOPS program, Cooperative Agencies and Resources for Education (CARE) assists students who are TANF/CalWORKs (Temporary Assistance to Needy Families/California Work Opportunities and Responsibility to Kids) recipients, 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 become 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) 473-7482

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

**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 Pell Grant, the Federal Supplemental Education Opportunity Grant, Federal Work-Study, Cal Grant B & C, Full Time Student Success Grant and Federal Direct Loans (Subsidized and Unsubsidized).

**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.

**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 LMC Counseling Services 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.
General Information

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 Regulations & Enforcement

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 5:00 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 regulations are enforced 24 hours a day, from 7:00 a.m. on Monday through 5:00 p.m. on 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

Within the Contra Costa Community College District, the Police Services department is responsible for campus safety and security and serves as the primary law enforcement agency at all District locations, including LMC’s Pittsburg Campus and Brentwood Center. The officers and staff are available to assist with problems involving unsafe conditions, lost property, personal injury, theft, civil disturbance, etc… All sworn officers are authorized to enforce all State and Federal laws and regulations on College/District-controlled property and surrounding areas.

Q*Spot: LMC’s LGBT Center

www.losmedanos.edu/GandLcenter
www.facebook.com/LMC.QSpot
(925) 473-7861

Q*Spot, LMC’s LGBT (Lesbian, Gay, Bisexual, Transgender) Center, is the home of LMC’s LGBT Studies program, which is currently developing an AA degree and certificate program. Q*Spot also offers information and support to the LMC community on issues related to sexual orientation and gender identity, and 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 and/or gender identity, and provides a safe and supportive place for LGBT people to meet at LMC.

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 college 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
Student Ambassadors are a select group of student leaders who represent the diverse population of Los Medanos College. These student leaders support student engagement on-campus by supporting the planning, production, and marketing of a variety of events and activities in Student Life each year.

Transfer & Career Services
www.losmedanos.edu/transfer | www.losmedanos.edu/career
(925) 473-7444
LMC Transfer & Career Services provides a variety of career development and exploration services to all students as well as information for students planning to transfer to four-year colleges and universities. Support services are available to help students explore and plan for transfer and career success.

Career Services
Transfer & Career Services provides information and programming that assists students in exploring majors and careers, preparing for job and internship searches through resume, cover letter and interview assistance, and best practices on-the-job for new professionals. Individual appointments are available with a career counselor to discuss career exploration, ideas and goals.

Transfer & Career Services provides a robust calendar of events that include the opportunity for students to connect with career and industry professionals as a way to explore options and make connections for internship and job opportunities. Programs include speakers, career panels, networking events and company visits.

Mission Statement
The mission of LMC Career Services, as part of Transfer & Career Services, 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 who attend a workshop focused on the job search process will learn techniques to improve their potential to find employment.
2. Undeclared students who 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.

Transfer Services
Transfer & Career Services provides information and programming that assists students in transferring to a four-year college. Outreach programs, university tours, workshops, fairs, weekly newsletters and social media, and the Transfer Academy (a learning community supporting students toward transfer-ready status) develop awareness of the opportunities and resources available to achieve student success and transfer.
Transfer & Career Services schedules regular visits by representatives from colleges and universities. Students can drop in for questions or schedule individual advising appointments with these representatives. Transfer & Career Services also coordinates tours of various transfer universities each semester.

Transfer & Career Services has extensive information regarding UC, CSU, out-of-state and private institutions, historically black colleges and universities (HBCUs), as well as provides workshops on topics such as completing UC, CSU, and private university admissions applications, financial aid resources, and next steps after receiving transfer admission. Additionally, LMC coordinates many programs designed to facilitate the transfer process. Some examples are Transfer Admission Guarantees (TAGs), Cross Enrollment programs, “On-the-Spot” Admissions, and the 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. Benefits of the academy include blocked General Education (GE) classes with other Transfer Academy students, academic support, and transfer counseling.

**Mission Statement**
The mission of LMC Transfer Services, as part of Transfer & Career Services, is to provide comprehensive services and resources to students to enhance awareness of and access to transfer information and processes, increasing their ability to transfer from LMC to four-year colleges/universities.

**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.

**Veterans Resource Center**
College Complex, CC-821
www.losmedanos.edu/veterans
(925) 473-7511

The Los Medanos College Veterans Resource Center opened in April 2016. The Center provides an evolving array of services and resources for our student veterans. Current staff include a veterans counselor, education benefit certifying officials, and work-study student veterans. Resources consist of access to computers with printing; a relaxing atmosphere for our veterans to study and network with other veterans; financial aid information/application assistance; academic counseling; and referrals to off-campus community veteran services and resources with dedicated meeting space on-site as needed.

**Instructional Services**

**Athletic Program**
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 at (925) 473-7605 or rvillegas@losmedanos.edu.

**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.
General Information

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 a.m. to 4:00 p.m., 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.

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.

Cooperative Work Experience Education
www.losmedanos.edu/cwee
(925) 473-7417

Cooperative Work Experience Education (CWEE) at Los Medanos College grants transferable 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) 473-7788

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. The Drop-In Computer Lab hours are as follows:

Fall / Spring hours: Monday - Thursday: 8:00 a.m. to 9:45 p.m.
                    Friday: 8:00 a.m. to 1:00 p.m.
Summer hours:       Monday - Thursday: 8:00 a.m. to 9:45 p.m.
Information Technology & Services

Library Building, 2nd floor
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:

- The staffing schedule for the Help Desk is posted weekly at the Help Desk counter and on the IT&S web page (www.losmedanos.edu/its/its.asp)

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

- Access to the Scantron reader for grading of Scantron-based tests and quizzes

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 96,500+ eBook titles. The library subscribes to 84 print journals and 58 electronic databases, which include access to thousands of full-text journals and newspapers. Additionally, the library holds over 19,000 streaming videos, 1,100 DVDs and CDs along with the equipment needed to utilize these items.

Two reserve textbook collections are available for limited checkout 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
- ESL and Spanish language collections
- 5 group study rooms
- Seating for 200
- Wireless coverage, including printing from laptops
- Full-color and black & white printers
- 1 self-checkout station
- 2 copy machines

Math Lab

Math Building, MA-102
www.losmedanos.edu/mathlab
(925) 473-7662 Pittsburg Campus
(925) 473-6925 Brentwood Center

The Math Tutoring and Computer Math Labs are staffed by professors, tutors, and Math Lab Coordinators and is the place for students to get help on lab assignments, course concepts, computer software, and other assignments. The Math Tutoring Lab at the Pittsburg Campus offers a large study area along with 5 smaller rooms for various sized study groups. Students can also check out calculators to use in class as well as textbooks to use in the Math Tutoring Lab. 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
The mission of the PUENTE Program is to increase the number of educationally under-served students who transfer to four-year colleges and universities, earn college degrees, and return to the community as mentors and leaders to future generations. The PUENTE Program, with a fifteen-year legacy at Los Medanos College, 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, columnists, artists, photographers, videographers and editors. Groups and organizations with short news items for publication should contact the “Experience” by noon on the Monday before each Friday’s issue. A two-week lead time is needed for the assignment of full-length stories or event coverage. The weekly print edition is available for pick-up from newspaper stands on campus. You can read the online edition at lmcexperience.com. For those needing information from older editions of the college newspaper, a historical archive of issues from Fall 1974 through Spring 2015 is available through the California Digital Newspaper Collection at www.cdnc.ucr.edu. Go to Browse by Title and click on the Experience link. You can view historical issues online or download the PDF files of specific issues.

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.

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

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

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

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

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

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

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

3. Students will be allowed to invite and to hear any person and off campus. Promoted by their exercise of the rights of citizenship both on intellectual and personal development of students as is often insured that institutional powers are not employed to inhibit such membership. Faculty members and administrative officials are subject to the obligations which accrue to them by virtue of citizenship enjoy and, as members of the academic community, they speech, peaceful assembly and right of petition that other community. As citizens, students enjoy the same freedom of opinion publicly and privately. They should always be free to support causes by orderly means which do not disrupt the regular and essential operation of the institution. At the same time, it should be made clear to the academic and the large community that in their public expressions or demonstrations, students or student organizations speak only for themselves.

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

As constituents of the academic community, students will be free, individually and collectively, to express their views on issues of institutional policy and on matters of general interest to the student body. The student body should have clearly defined means to participate in the formulation and application of institutional policy affecting academic and student affairs. The role of the student government and both its general and specific responsibilities should be made explicit, and the actions of the student government within the areas of its jurisdiction should be reviewed only through orderly and prescribed procedures.

Student Responsibilities and Educational Goals

1. It is the student’s responsibility to verify the correctness and completeness of his/her transcript upon transferring to a four-year institution. It is the student’s responsibility to pursue any discrepancies that may occur with the acceptance or non-acceptance of his/her transcript.

2. Each student has the responsibility as to the completeness and correctness of his/her transcript to receive an A.A. degree, certificate of completion or certificate of achievement.

3. It is the student’s responsibility to do the assigned coursework and attend courses regularly.

4. It is the student’s responsibility to drop courses he/she does not plan to attend.

Off-Campus Activities

Throughout the semester/school year, the District may sponsor voluntary off-campus extracurricular field trips/excursions. If you choose to participate, be advised that pursuant to California Code of Regulations, Subchapter 5, Section 55450 (also CCCCD Governing Board Policy 4002), you have agreed to hold the District, its officers, agents and employees harmless from any and all liability or claims which may arise out of or in connection with your participation in the activity.
Progress Evaluation by Faculty
Any student has the right to request and obtain an informal grade evaluation by his/her instructor prior to the mandatory drop date. In order for a student to make a knowledgeable decision of retention in a class and to increase motivation for improvement, the student needs to know his/her standing in each course.

Student Complaint Process
The Student Complaint Procedures are available to every Los Medanos College student, offering an equitable means of seeking an appropriate remedy for a grievance related to any college-related matter (other than as defined under the unlawful discrimination section of this catalog). Complaint procedures are provided for the following: grade appeals process, complaints regarding a faculty member, complaints regarding a staff member, or complaints about a manager. Copies of the Student Complaint Procedures are available in the following locations:
- Office of Student Life, GA-1, (925) 473-7555
- Office of Instruction, (925) 473-7397/(925) 473-7398
- Welcome Desk/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 (CCCCD 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
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 on a college instructional day unless otherwise noted.
      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.
   5. 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.

20. 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 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 76036, 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 identified 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 extra-curricular 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.

1. 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 also recommend expulsion.
   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 service 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:
• CCCCD Board Policy 3012
• CCCCD 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 permitted only in the parking lots. Smoking is not permitted within college buildings, the indoor and outdoor quads, interior hallways or in those walkways which are not open to the air. This policy prohibits smoking, including e-cigarettes and vaporizers and other uses of tobacco products by local ordinance, fire safety or health codes. In addition to recognizing the serious health risks associated with smoking, students should be aware that “willful or persistent smoking in areas where it has been prohibited by law or by regulation of the Governing Board” is a violation of the Student Code of Conduct and may result in disciplinary action.

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 and returning students are required to be assessed to determine the appropriate English and math placement for courses they may sign up for. Students are encouraged to submit previous transcripts from high school or college, AP test scores and CAAASPE (formerly EAP) scores to determine English and/or math placement. Students submitting transcripts or AP scores must submit them to the Admission & Records Office. Students may also submit scores from placement tests taken at other colleges within the last two years to the Assessment Center. Students that do not have access to transcripts or other test scores should schedule an appointment to take the placement test at the Pittsburg campus or at the Brentwood Center.

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) 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 Records Privacy Law**

A cumulative record of enrollment, scholarship, and educational progress shall be kept for each student. Student records shall be maintained in a manner to insure the privacy of all records and shall not, except as otherwise herein authorized, permit any access to nor release of information therein. Students have the right to examine their own records and provision is made for the student to have copies of those records by written request and by payment of appropriate fees. Provision is also made for the student to challenge the accuracy of these records. In conformance with federal and state laws, Los Medanos College hereby provides notice that the Contra Costa Community College District Governing Board has adopted a policy regarding access to student records maintained by the College.

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

- Student records shall be released pursuant to a student’s written consent.
- Directory information may be released in accordance with Board Policy, unless otherwise specified by the student.

**Directory information shall include:**

1. Student name
2. Student participation in officially recognized activities and sports, including weight, height, and high school of graduation of athletic team members.
3. Degrees and awards received by students, including honors, scholarship awards, athletic awards, and Dean’s List recognition.

- Student records shall be released pursuant to a judicial order or a lawfully issued subpoena, or in the event of litigation towards the college district. If a parent or eligible student initiates legal action against an educational agency or institution, the educational agency or institution may disclose to the court, without a court order or subpoena, the student’s educational records that are relevant for the educational agency or institution to defend itself.

- Whenever there is included in any student record any information concerning any disciplinary action taken by a community college in connection with any alleged sexual assault, or physical abuse, or threat of sexual assault, or any conduct that threatens the health and safety of the alleged victim, the alleged victim of that sexual assault or abuse shall be informed within three days of the results of any appeal. The alleged victim shall keep the records 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.
General Information

• Student records may be released to authorized representatives of the Comptroller General of the United States, the Secretary of Education, an administrative head of an education agency, state education officials, or their respective designees or the United States Office of Civil Rights, where that information is necessary to audit or evaluate a state or federally supported educational program or pursuant to federal or state law. Exceptions are that when the collection of personally identifiable information is specifically authorized by federal law, any data collected by those officials shall be protected in a manner that will not permit the personal identification of students or their parents by other than those officials, and any personally identifiable data shall be destroyed when no longer needed for that audit, evaluation, and enforcement of federal legal requirements.

• Student records may be released to officials of other public or private schools or school systems, including local, county or state correctional facilities where education programs are provided, where the student seeks or intends to enroll or is directed to enroll. The release is subject to the conditions in Education Code 76225.

• Student records may be released to agencies or organizations in connection with a student’s application for, or receipt of, financial aid, provided that information permitting the personal identification of those students may be disclosed only as may be necessary for those purposes as to financial aid, to determine the amount of the financial aid, or conditions that will be imposed regarding financial aid, or to enforce the terms or conditions of financial aid.

• Student records may be released to organizations conducting studies for, or on behalf of, accrediting organizations, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering financial aid programs, and improving instruction, if those studies are conducted in such a manner as will not permit the personal identification of students or their parents by persons other than representatives of those organizations and the information will be destroyed when no longer needed for the purpose for which it is conducted.

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

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

Availability of Specific Information

The following specific information is on file at the Admissions & Records Office and/or is available to students upon request.

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

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

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

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

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

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

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

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

Address Changes

Students are required by law to notify the Admissions & Records Office of changes of address. Address and phone number changes should be submitted by going into WebAdvisor on the college website, (www.losmedanos.edu). Students who are also working as employees of the college should submit address, phone and/or e-mail changes by the same procedure.

Student Right-To-Know and Campus Security Act

In compliance with the Student Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Contra Costa Community College District and Los Medanos College to make the following information available:

• The completion or graduation rates of certificate or degree-seeking, first-time, full-time students beginning Fall 2011 and annually thereafter. Based on a cohort of first-time, full-time freshman with a declared program of study, 31.44% attained a certificate or degree or became ‘transfer prepared’ during a three-year period, from Fall 2011 to Spring 2014. Based on the cohort of first-time freshmen with a declared program of study, 10.42% transferred to another public institution in California (UC, CSU, or other California Community College) prior to attaining a degree or certificate during a five semester period, from Spring 2012 to Spring 2014.

• 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.
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 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 www.teachcalifornia.org.

Students will find that the LMC Transfer & Career Services provides information and support for transfer planning. Students can drop in at Transfer & Career Services, 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 www.csumentor.edu. Admission representatives from local CSU campuses visit Transfer & Career Services on a regular basis. Please consult with an LMC counselor and check with Transfer & Career Services for more information.

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

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

Lower Division Transfers

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

1. They were eligible as a freshman at the time of high school graduation, i.e. met the eligibility index (GPA/SAT I score) and completed the 15 unit pattern of college preparatory subjects.
2. They were eligible as a freshman at the time of high school graduation except for subject requirements and have made up the missing subjects at a high school or college.
3. Some campuses may require completion of English composition and general education math.

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

Upper Division Transfers

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

1. Students must have a grade point average of 2.0 (C) or better in all transferable units attempted. Non-California residents must have a 2.4 grade point average or better.
2. Students must be in good standing at the last college or university attended (i.e., eligible to re-enroll).
3. Students must have completed or will complete prior to transfer at least 30 semester units of college coursework equivalent to courses that meet general education requirements with a grade of C or better in each course. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication, and critical thinking,) and at least one course of at least 3 semester units in college level mathematics. Students may complete the Intersegmental General Education Transfer Curriculum (IGETC).

Special Note

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

Every year, Los Medanos College students transfer successfully to the UC system. The UC system is comprised of ten campuses, the following nine of which have undergraduate programs: UC Berkeley, UC Davis, UC Irvine, UCLA, UC Merced, UC Riverside, UC San Diego, UC Santa Barbara and UC Santa Cruz. Admission representatives from UC campuses visit the Transfer & Career Services on a regular basis. Check with the Transfer & Career Services counter to obtain a schedule of these visits, or visit 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 that 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 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 UC 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
2. Complete the following course pattern requirement, earning a grade of C or better in each course:
   - Two transferable college courses (3 semester units each) in English composition, and;
   - One transferable college course (3 semester units) in mathematical concepts and quantitative reasoning, and;
   - Four transferable college courses (3 semester units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

Students who satisfy the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring to UC 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, including nine Historically Black Colleges and Universities (HBCUs).

To learn about current universities offering transfer guarantees, their specific requirements, and the timeline for completing an agreement, visit the Transfer & Career Services 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 & Career Services 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 Services or Transfer & Career Services for more information 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 Transfer & Career Services on a regular basis. Contact Transfer & Career Services for more information.
## Transfer 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
- Transfer & Career Services offers a variety of services and resources to help students transfer to the four-year institution of their choice.

## Transfer 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
- 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, as well as HBCUs (Historically Black Colleges and Universities) and more.

- **Cross Enrollment (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.

- **Cross 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.
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.

### English Language Communication and Critical Thinking

<table>
<thead>
<tr>
<th>Area</th>
<th>Title</th>
<th>Course Code</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Oral Communication</td>
<td>SPCH-110, 120</td>
<td>3</td>
</tr>
<tr>
<td>A2</td>
<td>Written Communication</td>
<td>ENGL-100</td>
<td>3</td>
</tr>
<tr>
<td>A3</td>
<td>Critical Thinking</td>
<td>PHIL-041, ENGL-220, ENGL-221, SPCH-120</td>
<td>3</td>
</tr>
</tbody>
</table>

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

### Scientific Inquiry and Quantitative Reasoning

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. (9 Semester units minimum)

<table>
<thead>
<tr>
<th>Area</th>
<th>Title</th>
<th>Course Code</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>Physical Science</td>
<td>ASTRO-010</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHEM-006, 007, 008, 025, 026, 028, 029</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYS-015, 035, 036, 040, 041, 042</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYSC-005</td>
<td></td>
</tr>
<tr>
<td>B2</td>
<td>Life Science</td>
<td>BIOSC-007, 008, 010, 020, 021, 040, 045, 050, ANTHR-001</td>
<td>3</td>
</tr>
<tr>
<td>B3</td>
<td>Laboratory Activity</td>
<td>ASTRO-010 and 011</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BIOSC-007, 008, 010, 020, 021, 040, 045, 050</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CHEM-006, 007, 008, 025, 026, 028, 029</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PHYS-015, 035, 036, 040, 041, 042</td>
<td></td>
</tr>
<tr>
<td>B4</td>
<td>Mathematics/Quantitative Reasoning</td>
<td>MATH-034, 035, 037, 040, 050, 060, 070, 075, 080, 120, 160</td>
<td>3</td>
</tr>
</tbody>
</table>

### Arts and Humanities

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

<table>
<thead>
<tr>
<th>Area</th>
<th>Title</th>
<th>Course Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Arts</td>
<td>ART-005, 006, 007, 008, 009, 035, DRAMA-015, 016, 070</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MUSIC-010, 012, 015, 017, SPAN-060</td>
</tr>
<tr>
<td>C2</td>
<td>Humanities</td>
<td>ART-016, 017, 018, CHIN-030, 040, DRAMA-030, 072</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENGL-124, 127, 128, 129, 132, 133, 140, 145, 150, 205, 230, 231</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FILIP-060, 061, FRNCH-060, 061, 062</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HUMAN-019, 020, 021, 022, 024, 030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ITAL-060, 061, PHIL-002, 033, 040, 042</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POLSC-033, SPAN-049, 050, 051, 052, 053</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SIGN-050, 065, 066, 067, 068</td>
</tr>
</tbody>
</table>

### Social Sciences

Courses taken from at least 2 disciplinary perspectives.

<table>
<thead>
<tr>
<th>DISCIPLINE(S)</th>
<th>COURSE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ADJUS-110, 160, 220</td>
</tr>
<tr>
<td></td>
<td>ANTHR-004, 005, 006, 007, 008</td>
</tr>
<tr>
<td></td>
<td>CHDEV-010, 020, 050</td>
</tr>
<tr>
<td></td>
<td>ECON-005,010, 011</td>
</tr>
<tr>
<td></td>
<td>ENGL-135</td>
</tr>
<tr>
<td></td>
<td>HIST-029, 030, 031, 033, 034, 035, 038, 039, 040, 046, 047, 052, 055, 061</td>
</tr>
<tr>
<td></td>
<td>JOURN-100</td>
</tr>
<tr>
<td></td>
<td>POLSC-010, 020, 033 (same as PHIL-033), 043</td>
</tr>
<tr>
<td></td>
<td>PSYCH-010, 011, 014, 017</td>
</tr>
<tr>
<td></td>
<td>SOCIO-015, 016, 017</td>
</tr>
<tr>
<td></td>
<td>SOCSSC-045, 135</td>
</tr>
<tr>
<td></td>
<td>SPCH-130, 150, 180</td>
</tr>
</tbody>
</table>

### Lifelong Learning and Self-Development

Minimum of one course, 3 units.

<table>
<thead>
<tr>
<th>Course Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS-010, ANTHR-007, BIOSC-005, CHDEV-010, PE-100</td>
</tr>
<tr>
<td>PSYCH-014, SOCIO-012</td>
</tr>
</tbody>
</table>

### U.S. History, Constitution and American Ideals

One course from group A and one course from group B
These courses may double count in Area D

**Group A:** POLSC-010, POLSC-020

**Group B:** ECON-005, HIST-029, HIST-030
IGETC: Intersegmental General Education Transfer Curriculum 2016 – 2017

REQUIREMENTS FOR STUDENTS TRANSFERRING TO CSU OR UC

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

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

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

Note: Although it is possible to fulfill the Associate Degree for Transfer by completing the IGETC for UC pattern, admission to CSU requires completion of an Oral Communication course (CSU GE Area A-1; IGETC Area 1C); therefore, students who plan to transfer to CSU should complete this course as part of their GE or elective units.

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

Math 037 and 050 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, 017

3B Humanities: ART-017, 018, 035, CHIN-040, DRAMA-030,
ENGL-127, 128, 129, 132, 133, 140, 145, 150, 205, 231, FILIP-061,
FRNC-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-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 are 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-004, 005, 006, 007, 008

4B Economics: ECON-010, 011

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

4D Gender Studies: ENGL-135, PSYCH-014, SPCH-180

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, 180

4H Political Science, Government and Legal Institutions:
ADJUS-110, PHIL-033, POLSC-010, 020, 033

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

4J Sociology and Criminology: ADJUS-110, SOCIO-015, 016, 017

AREA 5 Physical & Biological Sciences

At least 2 courses, one physical science course and one biological science course; at least one must include a laboratory. (7-9 semester units.)

5A Physical Science: ASTRO-010, 011, CHEM-006, 008, 025, 026,
028, 029, PHYS-015, 035, 036, 040, 041, 042, PHYSC-005

5B Biological Science: BIOSC-007, 008, 010, 020, 021,
040, 045, 050, ANTHR-001

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

No credit for BIOSC-010 if taken after BIOSC-020.
No credit for CHEM-006 if taken after CHEM-025.
No credit for PHYS-015 if taken after PHYS-035.
No credit for PHYSC-005 if taken after college level course in Astronomy, Chemistry, Geology or Physics.

AREA 6 Languages Other Than English

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

CHIN-030, 040; FILIP-060, 061; FRNCH-060, 061, 062; ITAL-060, 061;
SIGN-065, 066, 067, 068; SPAN-050, 051, 52, 53

AREA 7 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
UNIVERSITY OF CALIFORNIA CAMPUSES

- UC Davis  
  www.ucdavis.edu
- UC Berkeley  
  www.berkeley.edu
- UC San Francisco  
  www.ucsf.edu
- UC Santa Cruz  
  www.ucsc.edu
- UC Merced  
  www.ucmerced.edu
- UC Santa Barbara  
  www.ucsb.edu
- UC Los Angeles  
  www.ucla.edu
- UC Riverside  
  www.ucr.edu
- UC Irvine  
  www.uci.edu
- UC San Diego  
  www.ucsd.edu

UNIVERSITY OF CALIFORNIA AND CALIFORNIA STATE UNIVERSITY CAMPUSES

- Humboldt State University  
  www.humboldt.edu
- CSU Chico  
  www.csuchico.edu
- Sonoma State University  
  www.sonoma.edu
- California Maritime Academy  
  www.csum.edu
- CSU Sacramento  
  www.csus.edu
- San Francisco State University  
  www.sfsu.edu
- CSU East Bay  
  www.csueastbay.edu
- San Jose State University  
  www.sjsu.edu
- CSU Monterey Bay  
  www.csumb.edu
- CSU Stanislaus  
  www.csustan.edu
- CSU Fresno  
  www.csufresno.edu
- California Polytechnic State University, San Luis Obisbo  
  www.calpoly.edu
- CSU Chanel Islands  
  www.csuci.edu
- CSU Bakersfield  
  www.csusb.edu
- CSU Northridge  
  www.csun.edu
- CSU Los Angeles  
  www.calstatela.edu
- CSU Dominguez Hills  
  www.csudh.edu
- CSU San Bernardino  
  www.csusb.edu
- California Polytechnic State University, Pomona  
  www.csupomona.edu
- CSU Fullerton  
  www.fullerton.edu
- CSU Long Beach  
  www.cslub.edu
- CSU San Marcos  
  www.csusm.edu
- San Diego State University  
  www.sdsu.edu
Program Requirements, Courses and Learning Outcomes
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 Degree 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.adegreewithguarantee.com.

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

Associate Degree Requirements

Students should consult with an LMC counselor. The counselor will assist the student in planning the courses required to satisfy the major for the degree and all other graduation requirements. LMC students have the option of following the “Standard Path” or the “Transfer Path” when planning for an associate degree. See the following pages for more information on these options and the Associate Degree Requirement chart. Majors for an associate in science degree include: biological science, chemistry, or career technical programs. The associate in arts degree is awarded for all other majors. Students may earn multiple degrees.

Students may apply for substitutions only in their major and only for associate of arts degrees, associate of science degrees, and certificates of achievement.

Basic Skills 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 Certificate Requirements

Shorter skills 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. No substitutions allowed. 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.

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 centrism, 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
## LMC Programs of Study

### LMC Programs of Study

<table>
<thead>
<tr>
<th>Program of Study</th>
<th>Certificate of Achievement</th>
<th>Associate Degree</th>
<th>Program of Study</th>
<th>Certificate of Achievement</th>
<th>Associate Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administration of Justice</strong></td>
<td></td>
<td>AS-T*</td>
<td><strong>Drama</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic Law Enforcement Academy Intensive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Criminal Investigations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Criminal Law</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Anthropology</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Appliance Service Technology</strong></td>
<td>AS</td>
<td></td>
<td><strong>Electrical Technology</strong></td>
<td>AS</td>
<td></td>
</tr>
<tr>
<td><strong>Heating, Ventilation &amp; Air Conditioning Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electrical Appliance Technician</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Refrigeration Technician</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Art</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Art History</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fine Arts</strong></td>
<td>AA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Graphic Communications</strong></td>
<td>AA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Studio Arts</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Automotive Technology</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Air Conditioning Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Automotive Chassis Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engine Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engine Repair &amp; Machining Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Smog Technician Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transmission Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biological Science</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accounting</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Business Administration</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fundamental Business Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Office Administration</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Retail Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Small Business Management and Operations</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chemistry</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Development</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Assistant Teacher Permit Coursework</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Associate Teacher Permit Coursework</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Curriculum in Early Childhood Specialization Certificate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specialization – Infant Toddler Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specialization – School Age Care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School-Age Development &amp; Education Skill Certificate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School-Age Associate Teacher</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specialization Administration of Director Early Childhood Programs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Specialization – Special Needs Care &amp; Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication Studies</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Science</strong></td>
<td>AS-T*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Applications Specialist</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Support Specialist</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Support Specialist (Advanced)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Support Specialist (Basic)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Computer Science – Core Competencies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Foundation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Game Design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Networking and Security</strong></td>
<td>AS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Networking and Security (Advanced)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Networking and Security (Basic)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Certified PC Repair Technician</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Web Design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Degrees designed especially for those who plan to transfer to a four-year college or university.*
Pathways to an Associate Degree at LMC

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

- Complete 60 degree-applicable units with a cumulative grade point average of 2.0 or higher, with at least 12 units completed at LMC.
- Complete the specific LMC major requirements (a minimum of 18 units) listed in the college catalog with a grade of C or better.
- 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).*

Associate Degrees for Transfer

- Students complete 60 transferrable units that include the IGETC or CSU GE Breadth pattern and the required units in a major or area of emphasis. Students must complete 60 degree applicable units and must have 12 units at LMC.

Standard AA/AS Path

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

*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.
# Program Requirements, Courses and Learning Outcomes

## 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. This document is subject to change. For updates, contact Counseling Services or www.losmedanos.edu

### General Education Requirements

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Natural Sciences</td>
<td>Complete one of:</td>
<td>3 Units</td>
</tr>
<tr>
<td>B. Social &amp; Behavioral Sciences</td>
<td>Complete one of:</td>
<td>3 Units</td>
</tr>
<tr>
<td>C. Arts &amp; Humanities</td>
<td>Complete one of:</td>
<td>3 Units</td>
</tr>
<tr>
<td>D. Language and Rationality</td>
<td>Complete two courses:</td>
<td>6-7 Units</td>
</tr>
<tr>
<td>E. Ethnic/Multicultural Studies</td>
<td>Complete one of:</td>
<td>3 Units</td>
</tr>
</tbody>
</table>

**Total Units:** 18-19

*Courses can be counted in one box only.*
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 & 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
Associate Degree Requirements Courses may be identified as meeting a requirement for the standard Associate of Arts/Associate of Science degree(s) . These courses will be coded with an “LMC: ADR:” 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.

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.
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 English Composition</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 Independent study</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>PE/Activity or Occupational work experience field work</td>
<td>Contracted independent study with close supervision by an instructor. Highly structured physical activities directed and supervised by an instructor. 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.
# Reading Course Descriptions

<table>
<thead>
<tr>
<th>Course Title</th>
<th>BIOSC-020 Principles of Biology: Cellular Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course ID</td>
<td></td>
</tr>
<tr>
<td>Semester class hours lecture</td>
<td>54 total hours lecture, 108 total hours lab</td>
</tr>
<tr>
<td>Semester class hours laboratory</td>
<td></td>
</tr>
<tr>
<td>Units of credit</td>
<td>5 Units</td>
</tr>
<tr>
<td>Prerequisite</td>
<td>PREREQUISITE: MATH-029, MATH-030 or equivalent</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: BIOSC-010, High school biology, chemistry</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>LMC</td>
<td>DA</td>
</tr>
<tr>
<td>TRANSFER</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B</td>
</tr>
</tbody>
</table>

| Course Title                  | ENGIN-022 Programming with MATLAB for Engineers and Scientists |
| Course ID                    |                                                   |
| Semester class hours lecture | 54 total hours lecture, 54 total hours lab       |
| Semester class hours laboratory |                                                   |
| Units of credit              | 4 Units                                           |
| Prerequisite                  | 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                                           |

If no prerequisite is noted, none is required; and any student may enroll in the course.

**Course Title**
- **BIOSC-020 Principles of Biology: Cellular Processes**

**Course ID**

**Semester class hours lecture**
- 54 total hours lecture, 108 total hours lab

**Semester class hours laboratory**

**Units of credit**
- 5 Units

**Prerequisite**
- PREREQUISITE: MATH-029, MATH-030 or equivalent
- ADVISORY: BIOSC-010, High school biology, chemistry

**Advisories**
- Mastery of subject at a certain level is necessary for success in this class.

**Corequisite**
- Concurrent (simultaneous) enrollment in or prior successful completion of a companion course and/or lab is required.

**Degree Applicability**
- DA: Applies toward the completion of requirements for an associate degree;
- NDA: Cannot be applied to units required for an associate degree.

**Transfer**
- Course carries transfer credit to CSU and/or UC, but some restrictions may apply.

**Repeatability**

**Grading**

---

If no prerequisite is noted, none is required; and any student may enroll in the course.
# 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Transferable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS-100</td>
<td>Educational Services and Strategies</td>
<td>1.5</td>
<td>3</td>
<td></td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>This course is intended to assist the freshman</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>student athlete to transition into college. It</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>will address items facing today’s student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>athlete in the educational setting. This course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>will introduce the student athlete to college</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>support services, time management, study skills,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>requirements needed to participate athletically</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and to transfer to a four year institution.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: NDA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACS-110</td>
<td>Academy for College Excellence Foundation Course</td>
<td>1.5</td>
<td>3</td>
<td>ACS-110 (may</td>
<td>UC, CSU Gen.</td>
</tr>
<tr>
<td></td>
<td>This is an introductory course to the Academy</td>
<td></td>
<td></td>
<td>be taken</td>
<td>Ed. Area E</td>
</tr>
<tr>
<td></td>
<td>for College Excellence that helps students</td>
<td></td>
<td></td>
<td>concurrently)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>develop professional behaviors that lead to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>academic and “knowledge work” career success</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>such as developing self-discipline, leading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>self-managed teams, and creating effective</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>teams composed of individuals with different</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>working styles. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACS-111</td>
<td>Academy for College Excellence Team Self-</td>
<td>.5</td>
<td>3</td>
<td>ACS-110 (may</td>
<td>UC, CSU Gen.</td>
</tr>
<tr>
<td></td>
<td>Management Course</td>
<td></td>
<td></td>
<td>be taken</td>
<td>Ed. Area E</td>
</tr>
<tr>
<td></td>
<td>Introduces the theory and practice of team self-</td>
<td></td>
<td></td>
<td>concurrently)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>management and its application in work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>organizations: exploring the connections between</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>one’s purpose and intentions and one’s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>behaviors, and develops the self-management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>skills to successfully attain one’s goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- 54 total hours lecture
- 3 Units
- 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.

LMC: DA

TRANSFER: UC, 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.

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-112  Academy for College Excellence  
Survey Research on Community Issues
27 total hours lecture, 54 total hours lab  
2.5 Units  
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.
LMC: DA

ACS-170  Occupational Work Experience  
Education in Education
60-300 total hours  
1-4 Units  
PREREQUISITE: Approved online application  
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA  
TRANSFER: CSU

ACS-180  Internship in Education
60-300 total hours  
1-4 Units  
PREREQUISITE: Approved online application and employer placement  
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA  
TRANSFER: CSU

ACS-900s  Selected Topics in Education
DA varies with course content.
Administration of Justice

DEGREE—Associate in Science for Transfer
Administration of Justice

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

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.

To earn the Associate in Science in Administration of Justice for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.

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

REQUIRED CORE COURSES (6 UNITS TOTAL):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<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>
</tbody>
</table>

Program Student Learning Outcomes

1. Students will complete the academic requirements to transfer to a California State University Administration of Justice degree program.
2. Demonstrate the skills and knowledge necessary to take and pass local, state and federal criminal justice entry-level examinations or career advancement examinations.
3. Demonstrate excellent communications skills (oral, physical and/or written), critical thinking, ethical decision making and cultural and ethnic sensitivity.

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 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.

continued on next page


**Required Course:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<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>Criminal Trial Process</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-140</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-160</td>
<td>Community &amp; Justice System</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-220</td>
<td>Juvenile Procedure</td>
<td>3</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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-005</td>
<td>Basic Law Enforcement Academy</td>
<td>25</td>
</tr>
</tbody>
</table>

**Total Units for this Certificate:** 25

---

**Program Student Learning Outcomes**

1. Be academically prepared to obtain an entry-level or midlevel position within the Criminal Justice System.
2. Apply critical thinking to research, evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement entry level examination or career advancement examinations.
4. Appropriately apply the hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these carried professions.
6. Demonstrate professional and ethical responsibility in their decisions.

**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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<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-124</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>ADJUS-140</td>
<td>Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ART-072</td>
<td>Introduction to Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units for this Certificate:** 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 chain of custody for evidence.
4. Accurately testify findings in court.
5. Prepare students to take and successfully pass entry-level industry examinations.

**Certificate of Achievement in Criminal Law**

**Required Courses:**

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

**Total Units for this Certificate:** 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.
**COURSE DESCRIPTIONS**

**ADJUS-005  Basic Law Enforcement Academy - Intensive**

162 total hours lecture, 858 total hours lab
25 units

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

ADVISORY: Eligibility for ENGL-100

The Basic Law Enforcement Academy 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.

**LMC:** ADR: Social and Behavioral Sciences; DA

**TRANSFER:** UC; CSU Gen. Ed. Area D; IGETC Area 4H, 4J

**ADJUS-098  Independent Study in Administration of Justice**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

**ADJUS-110  Introduction to Criminal Justice**

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-090

This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining the integrated, interdisciplinary methods of crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the justice system and the evolving forces that have shaped those principals and approaches. Although justice structure and process is examined in a cross cultural context, emphasis is placed on the United States justice system, particularly the structure and function on United States police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies. May not be repeated.

**LMC:** ADR: Social and Behavioral Sciences; DA

**TRANSFER:** UC; CSU Gen. Ed. Area D; IGETC Area 4H, 4J

**ADJUS-120  Concepts of Criminal Law**

54 total hours lecture
3 Units

PREREQUISITE: ADJUS-110

ADVISORY: Eligibility for ENGL-100

This course is an in-depth study of the concepts, historical development, and philosophy of criminal law and the substantive criminal law commonly enforced in California. It includes a detailed examination of legal definitions, classifications of crimes, corpus delicti, parties to a crime, defenses to crime, and a brief introduction to laws of arrest and judicial procedure. Students will be required to research legal briefs/decisions. May not be repeated. (C-ID AJ 120)

**LMC:** DA

**TRANSFER:** CSU

**ADJUS-122  Criminal Trial Process**

54 total hours lecture
3 Units

PREREQUISITE: ADJUS-110

ADVISORY: Eligibility for ENGL-090

This course provides an examination and analysis of due process in criminal proceedings from pre-arrest through trial and appeal utilizing statutory law and state and constitutional precedents. May not be repeated. (C-ID AJ 122)

**LMC:** DA

**TRANSFER:** CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Prerequisites</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJUS-124</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
<td>54</td>
<td>PREREQUISITE: ADJUS-110</td>
<td>ADVISORY: Eligibility for ENGL-090</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)</td>
</tr>
<tr>
<td>ADJUS-140</td>
<td>Introduction to Criminal Investigation</td>
<td>3</td>
<td>54</td>
<td>PREREQUISITE: ADJUS-110</td>
<td>ADVISORY: Eligibility for ENGL-100, ART-072</td>
<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)</td>
</tr>
<tr>
<td>ADJUS-160</td>
<td>Community &amp; the Justice System</td>
<td>3</td>
<td>54</td>
<td>PREREQUISITE: ADJUS-110; eligibility for ENGL-100</td>
<td>ADVISORY: ADJUS-110, eligibility for ENGL-100</td>
<td>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)</td>
</tr>
<tr>
<td>ADJUS-170</td>
<td>Occupational Work Experience Education in Justice</td>
<td>1-4</td>
<td>60-300</td>
<td>PREREQUISITE: Approved online application</td>
<td>ADVISORY: Eligibility for ENGL-090</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.</td>
</tr>
<tr>
<td>ADJUS-180</td>
<td>Internship in Administration of Justice</td>
<td>1-4</td>
<td>60-300</td>
<td>PREREQUISITE: Approved online application and employer placement</td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
</tr>
</tbody>
</table>

LMC: DA  
TRANSFER: CSU
ADJUS-200   Introduction to Corrections
54 total hours lecture
3 Units
PREREQUISITE: ADJUS-110
ADVISORY: Eligibility for ENGL-100

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)

LMC: DA
TRANSFER: CSU

ADJUS-220   Juvenile Procedures
54 total hours lecture
3 Units
ADVISORY: ADJUS-110; eligibility for ENGL-100

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)

LMC: DA
TRANSFER: CSU

ADJUS-900s   Selected Topics in Administration of Justice
DA varies with course content.

Air Conditioning and Refrigeration

ACREF-045   Basic Heating and Cooling Technology
18 total hours lecture, 54 total hours lab
2 Units
ADVISORY: Prior or concurrent enrollment in: APPLI-023, 024, 025 or 026

This course is designed to present the basic fundamentals of domestic heating and air conditioning systems. Students will get hands on practice working on heating and cooling systems. The focus will be on system installation, understanding refrigeration system operation, proper charging techniques, electrical circuitry, and the different voltages used in these units. This class is for students in the Appliance Program or those interested in learning basic heating and air conditioning technology. The course will 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.

LMC: DA
TRANSFER: CSU

ACREF-073   Commercial Refrigeration Technology
27 total hours lecture, 44 total hours lab
2 Units
ADVISORY: ETEC-004; 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.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
<th>Advisory Prereqs</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACREF-075</td>
<td>HVAC Technician H1A Heating Technology</td>
<td>27</td>
<td>2</td>
<td>ETEC-004; eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>ACREF-076</td>
<td>HVAC-Residential and Small Commercial Air Conditioning Technology</td>
<td>27</td>
<td>2</td>
<td>ETEC-004; ACREF-073 or equivalent; eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>ACREF-077</td>
<td>Air Distribution (Duct) Testing and Repair</td>
<td>27</td>
<td>2</td>
<td>ETEC-004; eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>ACREF-078</td>
<td>HVAC - Load Calculation and Duct Design</td>
<td>18</td>
<td>1.5</td>
<td>Eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>ACREF-098</td>
<td>Independent Study in Refrigeration</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.</td>
</tr>
<tr>
<td>ACREF-170</td>
<td>Occupational Work Experience Education in Air Conditioning/Refrigeration</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application; Eligibility for ENGL-090</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.</td>
</tr>
</tbody>
</table>
**ACREF-180 Internship in Air Conditioning/Refrigeration**

60-300 total hours  
1-4 Units  
PREREQUISITE: Approved online application and employer placement  
ADVISORY: Eligibility for ENGL-090  

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

LMC: DA  
TRANSFER: CSU  

**ACREF-900s Selected Topics in Refrigeration**  
DA varies with course content.

---

**Anthropology**

**DEGREE--Associate in Arts for Transfer Anthropology**

**ASSOCIATE IN ARTS**  
**ANTHROPOLOGY FOR TRANSFER DEGREE**  

The Associate in Arts in Anthropology for Transfer degree at Los Medanos College will provide students with an introduction to the fields of anthropology. Anthropology is the study of the human species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classifications as a species and our inclusion in the Order Primates, and our species past developments, including our historically steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into five main sub-fields: Cultural Anthropology, Physical Anthropology, and Archaeology, Linguistics, and Applied anthropology. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Physical Anthropologists aim to study our species from a biological perspective- examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication. Applied anthropology aims to solve global social problems affecting the world.

The Associate in Arts in Anthropology for Transfer degree is designed to meet the needs of a broad spectrum of students. In addition to providing valuable multicultural understanding and cultural literacy life skills, career opportunities for students include jobs in international development/assistance(nonprofit and government), education, museums, international business, zoos, human services, health care, social services occupations and other related fields. The associate degree in Anthropology provides preparation for transfer to Anthropology programs at four year institutions.

To earn the Associate in Arts in Anthropology for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

---

**Anthropology**

**DEGREE--Associate in Arts for Transfer Anthropology**

**ASSOCIATE IN ARTS**  
**ANTHROPOLOGY FOR TRANSFER DEGREE**  

The Associate in Arts in Anthropology for Transfer degree at Los Medanos College will provide students with an introduction to the fields of anthropology. Anthropology is the study of the human species throughout time; focusing on our diverse modern culture and cultural adaptations, our biological classifications as a species and our inclusion in the Order Primates, and our species past developments, including our historically steps to our first civilizations. The goal of Anthropology is to study the similarities and differences in biological and cultural adaptations and features across the globe throughout our human history.

Anthropology is a holistic discipline, which means that anthropologists study all aspects of humans and our behavior. The field of Anthropology has been broken up into five main sub-fields: Cultural Anthropology, Physical Anthropology, and Archaeology, Linguistics, and Applied anthropology. Cultural Anthropology is concerned with the study of human culture and its variations across time and space. Physical Anthropologists aim to study our species from a biological perspective- examining our DNA, relationship to our closest animal relatives, the primates and the fossil evidence of our earliest human ancestors. Archaeology is the study of our past, focused specifically on reconstructing past behavior by looking at objects used by past people. Linguistic Anthropologists study human language and communication. Applied anthropology aims to solve global social problems affecting the world.

The Associate in Arts in Anthropology for Transfer degree is designed to meet the needs of a broad spectrum of students. In addition to providing valuable multicultural understanding and cultural literacy life skills, career opportunities for students include jobs in international development/assistance(nonprofit and government), education, museums, international business, zoos, human services, health care, social services occupations and other related fields. The associate degree in Anthropology provides preparation for transfer to Anthropology programs at four year institutions.

To earn the Associate in Arts in Anthropology for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.
**Anthropology**

<table>
<thead>
<tr>
<th>REQUIRED CORE COURSES (9 UNITS TOTAL):</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR-001 Introduction to Biological Anthropology 3</td>
</tr>
<tr>
<td>ANTHR-004 Introduction to Archaeology 3</td>
</tr>
<tr>
<td>ANTHR-006 Cultural Anthropology 3</td>
</tr>
<tr>
<td>TOTAL UNITS 9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST A – SELECT ONE COURSE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR-008 Anthropological Linguistics 3</td>
</tr>
<tr>
<td>MATH-034 Introduction to Statistics 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST B – SELECT ONE TO TWO COURSES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>One course from List A not already used 3-4</td>
</tr>
<tr>
<td>PSYCH-017 Introduction to Research Methods in Psychology 3</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>SOCIO-017 Introduction to Research Methods 3</td>
</tr>
<tr>
<td>TOTAL UNITS 3-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIST C – SELECT ONE COURSE OR ONE COURSE FROM LIST A OR LIST B NOT ALREADY USED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIO-015 Introduction to Sociology 3</td>
</tr>
<tr>
<td>ANTHR-007 Culture Change and Globalization 3</td>
</tr>
<tr>
<td>HIST-046 History and Cultures of Native Americans in North America (Pre European Contact through 1838) 3</td>
</tr>
<tr>
<td>HIST-047 History and Cultures of Native Americans in North America (1830 to Present) 3</td>
</tr>
<tr>
<td>SPCH-150 Intercultural Communication 3</td>
</tr>
<tr>
<td>TOTAL UNITS IN THE MAJOR 18-19</td>
</tr>
</tbody>
</table>

| TOTAL UNITS FOR THE DEGREE 60 |

Program Level Student Learning Outcomes:

1. Utilize critical thinking skills to analyze, evaluate and make decisions regarding current issues in anthropology.
2. Recognize the complexity of social, cultural and global diversity in anthropology.
3. Demonstrate understanding of the major theoretical perspectives, concepts and research findings in the field of anthropology.
4. Demonstrate an understanding of biological and cultural developments underlying behavior and the human experience.
5. Demonstrate the knowledge of the social and ethical implications and outcomes of gathering data, while doing fieldwork, participant-observation, and research.

**Course Descriptions**

**ANTHR-001 Introduction to Biological Anthropology**

54 total hours lecture
3 Units

**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.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B2; IGETC Area 5B

**ANTHR-004 Introduction to Archaeology**

54 total hours lecture
3 Units

**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 archaeologists 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. (C-ID ANTH 150)

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4A
ANTHR-005  General Anthropology
54 total hours lecture
3 Units
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.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4A

ANTHR-006  Cultural Anthropology
54 total hours lecture
3 Units
ADVISORY: ENGL-100
This course is an introduction to the study of cultural anthropology which focuses on a broad view of the learned aspects of human life. The course includes the observations and analysis of cultural traditions, i.e. child-rearing processes, life styles types and adaptations, social and family organizations, creative elements of human life, and basic anthropological theories and concepts. Students will be exposed to divergent cultures and to the status of today’s vanishing cultures. Opportunities for the development of skills in critical thinking, problem-solving and effective learning will be provided throughout the course. May not be repeated. (C-ID ANTH 120)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4A

ANTHR-007  Culture Change and Globalization
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course focuses on the tremendous impact of culture change experienced worldwide both in industrialized and non-industrialized societies. The content deals with the processes of change, problems which arise due to change and controversial issues such as deculturation and assimilation. Students will have the opportunity to understand and approach change from a psychological, social, economic, political, and environmental perspective. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D, E; IGETC Area 4A

ANTHR-008  Introduction to Anthrooplogical Linguistics
54 total hours lecture
3 Units
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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4A

ANTHR-098  Independent Study in Anthropology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated. (C-ID ANTH 130)
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.

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.

REQUIRED COURSES:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPL-013</td>
<td>Beginning Electrical Appliances Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-015</td>
<td>Electrical Appliances I</td>
<td>4</td>
</tr>
<tr>
<td>APPL-014</td>
<td>Advances Electrical Appliances Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-016</td>
<td>Advanced Electrical Appliances II</td>
<td>4</td>
</tr>
<tr>
<td>APPL-020</td>
<td>Electrical Appliance Shop Practice</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-021</td>
<td>Electrical Appliance Lab: Tech I</td>
<td>1</td>
</tr>
<tr>
<td>APPL-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-025</td>
<td>Refrigeration I</td>
<td>4</td>
</tr>
<tr>
<td>APPL-024</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-026</td>
<td>Advanced Refrigeration II</td>
<td>4</td>
</tr>
<tr>
<td>APPL-030</td>
<td>Refrigeration Shop Practice</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-031</td>
<td>Refrigeration Lab: Tech I</td>
<td>1</td>
</tr>
</tbody>
</table>

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.

REQUIRED COURSES:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPL-013</td>
<td>Beginning Electrical Appliances Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-014</td>
<td>Advanced Electrical Appliances Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-021</td>
<td>Electrical Appliance Lab: Tech I</td>
<td>1</td>
</tr>
<tr>
<td>APPL-023</td>
<td>Basic Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-025</td>
<td>Refrigeration I</td>
<td>4</td>
</tr>
<tr>
<td>APPL-026</td>
<td>Advanced Refrigeration II</td>
<td>4</td>
</tr>
<tr>
<td>APPL-030</td>
<td>Refrigeration Shop Practice</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPL-031</td>
<td>Refrigeration Lab: Tech I</td>
<td>1</td>
</tr>
<tr>
<td>APPL-037</td>
<td>Intermediate Appliance &amp; Refrigeration Lab</td>
<td>1</td>
</tr>
<tr>
<td>APPL-038</td>
<td>Advanced Appliance &amp; Refrigeration Lab</td>
<td>1</td>
</tr>
</tbody>
</table>
APPLI-046  Principles and Repair of Microwave Ovens  .5
ACREF-045  Basic Heating & Cooling Technology  2

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.

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

TOTAL UNITS FOR THIS CERTIFICATE  36

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

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 problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.

COLLEGE SKILLS CERTIFICATES

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.

REQUIRED COURSES: UNITS
APPLI-023  Basic Refrigeration Tech 1  3
APPLI-024  Advanced Refrigeration Tech I  3
APPLI-025  Refrigeration I  4
APPLI-026  Advanced Refrigeration II  4

AND ALL OF THE FOLLOWING: UNITS
ACREF-045  Basic Heating and Cooling Technology  2
ACREF-073  Commercial Refrigeration Technology  2
ACREF-075  HVAC Technician H1A Heating Technology  2
ACREF-076  HVAC Residential and Small Commercial Air Conditioning Tech  2
ACREF-077  Air Distribution (Duct) Testing and Repair  2
ACREF-078  HVAC Load Calculation and Duct Design  1.5

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE  14.5-15.5

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.
2. Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.

Electrical Appliance Technician

ONE OF THE FOLLOWING: UNITS
APPLI-013  Beginning Electrical Appliances Tech I  3
APPLI-015  Electrical Appliances I  4
APPLI-014  Advanced Electrical Appliances Tech I  3
APPLI-016  Advanced Electrical Appliances II  4

AND ONE OF THE FOLLOWING: UNITS
APPLI-020  Electrical Appliance Shop Practice  5
APPLI-021  Electrical Appliance Lab: Tech I  1

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE  14-19

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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</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>
<td>4</td>
</tr>
<tr>
<td>APPLI-024</td>
<td>Advanced Refrigeration Tech I</td>
<td>3</td>
</tr>
<tr>
<td>APPLI-026</td>
<td>Advanced Refrigeration II</td>
<td>4</td>
</tr>
</tbody>
</table>

AND

ONE OF THE FOLLOWING:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLI-030</td>
<td>Refrigeration Shop Practice</td>
<td>5</td>
</tr>
<tr>
<td>APPLI-031</td>
<td>Refrigeration Lab Tech I</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 15-20

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
54 total hours lecture  
3 Units  
ADVISORY: Concurrent enrollment in APPLI-020, 035 or 036 and ETEC-004; eligibility for ENGL-090

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

LMC: DA  
TRANSFER: CSU

APPLI-014 Advanced Electrical Appliances Tech I
54 total hours lecture  
3 Units  
ADVISORY: APPLI-013; concurrent enrollment in lab class APPLI-020, 035 or 036; eligibility for ENGL-090

This course is a continuation of APPLI-013 and is designed to give the student a strong background in the repair of electrical appliances. Students majoring in appliance repair take this course to complete the electrical appliance part of the program. The course focuses on theory and practice in the diagnosis and repair of major brands of washers, gas dryers, gas ranges, dishwashers, and trash compactors. Detailed consideration will be given to understanding the mechanical and electrical parts of the appliances as well as troubleshooting, estimating, and proper procedures in making repairs. Material that is covered in the lecture will be put into practice in the accompanying lab class. Up-to-date information will be presented on how computer and electronic technology is applied to home appliances. May not be repeated.

LMC: DA  
TRANSFER: CSU

APPLI-015 Electrical Appliances I
72 total hours lecture, 18 total hours lab  
4 Units  
ADVISORY: Concurrent enrollment in lab class APPLI-020, 035 or 036 and; 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.

LMC: DA  
TRANSFER: CSU

APPLI-016 Advanced Electrical Appliances II
72 total hours lecture, 18 total hours lab  
4 Units  
ADVISORY: Concurrent enrollment in APPLI-020, 035 or 036; eligibility for ENGL-090

This is a continuation of APPLI-015 with special attention paid to repairing high efficiency appliances. Emphasis will be on troubleshooting and diagnosing of both gas and electrical/electronic appliances. Servicing techniques will cover the use of computer based information used in the appliance field, wiring diagrams and schematics with application under simulated industry-type conditions. Students will learn theory and practice in the diagnosis and repair of major brands of washers, dryers, ranges and dishwashers. The focus will be on un-
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.

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

**APPLI-020  Electrical Appliance Shop Practice**

270 total hours lab
5 Units

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

This introductory course in electrical appliances shop practice provides students with the hands-on foundation needed to repair electrical appliances. The course is designed to give a beginning student the shop practice necessary to develop skills in troubleshooting and repairing electrical appliances. The course focuses on practice in the diagnosis and repair of major brands of washers, dryers, ranges, dishwashers and electrical circuit use. The shop provides an atmosphere that simulates conditions in the appliance repair field enabling students to work on various brands of washers, dryers, ranges, dishwashers, cooking appliances and shop safety. May not be repeated.

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

**APPLI-021  Electrical Appliance Lab: Tech I**

54 total hours lab
1 Unit

**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.

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

**APPLI-023  Basic Refrigeration Tech I**

54 total hours lecture
3 Units

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

This is a basic domestic refrigeration course covering refrigeration principles and theories. The function and operation of each system component and the relationship between those components and electrical circuits will be addressed. Servicing of compressor type refrigeration units and troubleshooting electrical circuits are the major content areas of this course. Special emphasis will be given to understanding the mechanical and electrical parts of refrigeration systems. Proper use of test equipment will be covered in troubleshooting and diagnosing of refrigeration units. Material that is covered in the lecture will be put into practice in the accompanying lab/shop practice class. May not be repeated.

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

**APPLI-024  Advanced Refrigeration Tech I**

54 total hours lecture
3 Units

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

This course is a continuation of APPLI-023 and is designed for students who are majoring in appliance technology. Refrigeration material presented in this course is a must for technicians entering the appliance repair field. Theory and practice in the diagnosis and repair of major brands of refrigerators will be covered. Emphasis will be given to understanding the mechanical and electrical component operation. Troubleshooting and diagnosing of both mechanical and electrical problems will be emphasized. EPA rules and regulations regarding refrigerants containing CFC will be presented. The function and operation of each system component and the relationship between those components and electrical circuits will be addressed. Servicing of standard type compressors systems, variable speed compressors and troubleshooting electrical/electronic circuits are the major content of this course. Material that is covered will be put into practice in the accompanying lab/shop practice class. May not be repeated.

**LMC: DA**
**TRANSFER: CSU**
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lab/Hours</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLI-025</td>
<td>Refrigeration I</td>
<td>4</td>
<td>72 lecture, 18 lab</td>
<td>Concurrent enrollment in lab class APPLI-020, 035 or 036; eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPLI-026</td>
<td>Advanced Refrigeration II</td>
<td>4</td>
<td>72 lecture, 18 lab</td>
<td>Concurrent enrollment in lab class APPLI-030, 035 or 036; eligibility for ENGL 90</td>
<td>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.</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPLI-030</td>
<td>Refrigeration Shop Practice</td>
<td>5</td>
<td>270 lab</td>
<td>Concurrent enrollment in APPLI-025, or 026</td>
<td>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 will work on various brands of refrigerators, freezers, and window air conditioners provided. May not be repeated.</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPLI-031</td>
<td>Refrigeration Lab: Tech I</td>
<td>1</td>
<td>54 lab</td>
<td>Concurrent enrollment in APPLI-023, 024, 025, or 026</td>
<td>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, electrical test equipment, 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.</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPLI-035</td>
<td>Intermediate Appliance Lab</td>
<td>5</td>
<td>270 lab</td>
<td>Concurrent enrollment in APPLI-013, 014, 015 or 016</td>
<td>This is an intermediate shop practice course and is a continuation of APPLI 20 and 30 in repairing electrical appliances and domestic refrigeration units. Emphasis will be placed on hands-on applications troubleshooting, diagnosing, estimating and servicing techniques in a simulated industry-type shop environment. The course focuses on practicing the diagnosis and repair of major brands of washers, dryers, ranges, dishwashers and electrical circuits, while emphasizing shop safety. Students in this class will work as group leaders teaching beginning students how to repair appliances in the shop. May not be repeated.</td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPLI-036 Advanced Appliance and Refrigeration Lab

- **270 total hours lab**
- **5 Units**

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

This is a continuation of APPLI-035 and is an advanced shop practice course in repairing electrical appliances, gas appliances and domestic refrigeration units. Students will practice diagnosing and repairing the latest major brands of washers, dryers, ranges, dishwashers, refrigerators and electrical circuits. Emphasis will be placed on developing job skills needed in the appliance field such as troubleshooting, diagnosing, estimating, and providing customer service. Students will learn how to repair brands 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.

**LMC:** DA

**TRANSFER:** CSU

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

- **54 total hours lab**
- **1 Unit**

**ADVISORY:** APPLI-021, APPLI-031. Concurrent enrollment in APPLI-023, 024, 025, or 026

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.

**LMC:** DA

**TRANSFER:** CSU

### APPLI-038 Advanced Appliance and Refrigeration Lab: Tech I

- **54 total hours lab**
- **1 Unit**

**ADVISORY:** APPLI-021, APPLI-031 & APPLI-037. Concurrent enrollment in APPLI-023, 024, 025, or 026

This is a continuation of APPLI-037 and is an advanced lab 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. This advanced lab class is part of the Appliance Service Technician I Certificate of Achievement (primary an evening program). May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

### APPLI-046 Principles and Repair of Microwave Ovens

- **8 total hours lecture, 12 total hours lab**
- **.5 Unit**

**ADVISORY:** Concurrent or prior enrollment in APPLI-013, 014, 015 or 016

This course is designed for students in the appliance program and appliance technicians working in the field. It will cover basic microwave oven concepts, principles of operation, electrical circuitry, electronic controls, high voltage circuits, troubleshooting techniques and safety procedures. Students will learn using the latest models of microwaves and ranges with microwaves integrated into to 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.

**LMC:** DA

**TRANSFER:** CSU

### APPLI-098 Independent Study in Appliance Service Technology

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.
**APPLI-170**  Occupational Work Experience in Appliance Service Technology

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

**APPLI-180**  Internship in Appliance Service Technology

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

**APPLI-900s**  Selected Topics in Appliance Service Technology

DA varies with course content.

---

**Art**

**DEGREE—Associate in Arts for Transfer**
- Studio Arts
- Art History

**DEGREES—Associate of Arts**
- Fine Arts
- Graphic Communications

**CERTIFICATE OF ACHIEVEMENT**
- Graphic Communications

The Art Department (Fine Arts, Art History 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, as well as 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 G.E. courses that meet transfer requirements to the U.C. or CSU systems.

**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 earn the Associate in Arts in Studio Arts for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.
**Associate in Arts in Studio Arts for Transfer**

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-008</td>
<td>Western Art History III: Art of the Modern World (1550 A.D. to 1920)</td>
<td>3</td>
</tr>
<tr>
<td>ART-009</td>
<td>Western Art History IV: Modern, Post-modern and Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td>ART-010</td>
<td>Two-Dimensional Design Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ART-011</td>
<td>Three-Dimensional Design Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ART-020</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 15

**LIST A:** SELECT ONE OF THE FOLLOWING: 3 UNITS:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-016</td>
<td>Asian Art History</td>
</tr>
</tbody>
</table>

**LIST B:** SELECT THREE OF THE FOLLOWING ELECTIVES (9 UNITS):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-021</td>
<td>Intermediate Drawing</td>
</tr>
<tr>
<td>ART-030</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>ART-038</td>
<td>Introduction to Printmaking</td>
</tr>
<tr>
<td>ART-040</td>
<td>Introduction to Painting</td>
</tr>
<tr>
<td>ART-047</td>
<td>Color Theory</td>
</tr>
<tr>
<td>ART-066</td>
<td>Introduction to Ceramics</td>
</tr>
<tr>
<td>ART-069</td>
<td>Ceramic Sculpture</td>
</tr>
<tr>
<td>ART-072</td>
<td>Introduction to Digital Photography</td>
</tr>
<tr>
<td>ART-250</td>
<td>Introduction to Digital Art</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR** 27

**TOTAL UNITS FOR THE DEGREE** 60

**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.

**ASSOCIATE IN ARTS**

**ART HISTORY FOR TRANSFER DEGREE**

To achieve the Associate in Arts in Art History for Transfer to a CSU from Los Medanos College, students must (1) complete the 24 units of Art History 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. Students will be prepared to transfer with a broad and deep appreciation and knowledge of the academic discipline of art history, the chronological and cultural developments that allow them to make connections of historical events and artistic products. Perhaps even more importantly, students will be prepared to practice the disciplines of critical thinking, analysis and synthesis in reading and writing that they have been prepared for by the major and other transfer requirements.

To earn the Associate in Arts in Art History for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

**REQUIRED COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-006</td>
<td>Western Art History I: Art of the Prehistoric and Ancient World (to 350)</td>
<td>3</td>
</tr>
<tr>
<td>ART-007</td>
<td>Western Art History II: Art of the Developing World (350 to 1550)</td>
<td>3</td>
</tr>
<tr>
<td>ART-008</td>
<td>Western Art History III: Art of the Modern World (1550 A.D. to 1920)</td>
<td>3</td>
</tr>
<tr>
<td>ART-009</td>
<td>Western Art History IV: Modern, Post-modern and Contemporary Art</td>
<td>3</td>
</tr>
<tr>
<td>ART-020</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 15

**LIST A – SELECT ONE COURSE: 3 UNITS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-016</td>
<td>Asian Art History</td>
</tr>
<tr>
<td>ART-018</td>
<td>Art of the Americas</td>
</tr>
</tbody>
</table>

**LIST B – SELECT ONE COURSE: 3 UNITS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-010</td>
<td>Two-Dimensional Design Concepts</td>
</tr>
<tr>
<td>ART-011</td>
<td>Three-Dimensional Design Concepts</td>
</tr>
<tr>
<td>ART-030</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>ART-066</td>
<td>Introduction to Ceramics</td>
</tr>
<tr>
<td>ART-069</td>
<td>Ceramic Sculpture</td>
</tr>
<tr>
<td>ART-072</td>
<td>Introduction to Digital Photography</td>
</tr>
<tr>
<td>ART-250</td>
<td>Introduction to Digital Art</td>
</tr>
</tbody>
</table>
Program Level Student Learning Outcomes:
1. Read art-related historical texts and resource documents critically; synthesize their research and observational skills in order to communicate effectively as a writer and speaker.
2. Model and distinguish between differing art historical methodologies and approaches to problem solving in related disciplines.
3. Make connections between artistic products and processes over time; observe how art informs culture and culture informs art in order to develop good critical and creative thinking skills.
4. Consider the ethical implications inherent in artistic patronage and artistic production.
5. Develop and demonstrate a worldview informed by diverse art and architectural products created in multiplehistorical, social, multicultural and global environments.

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

Associate of Arts Degree in Fine Arts

REQUISITE COURSES:                                       UNITS
ART-005 Visual Arts Concepts                             3
ART-006, 7, 8 or 9 Western Art History I, II, III or IV  3
ART-010 Two-Dimensional Design Concepts                  3
ART-011 Three-Dimensional Design Concepts                3
ART-020 Introduction to Drawing (Fine Arts)              3
ART-025 Design with Adobe InDesign                      3
ART-040 Introduction to Photography                      3
ART-072 Introduction to Digital Photography              3
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-038 Introduction to Photography                       3
ART-040 Introduction to Painting                          3
ART-041 Intermediate Painting                             3
ART-047 Introduction to Color Theory                      3
ART-060 Concepts of Sculpture                             3
ART-074 Photo II: Developing a Personal Vision           3
ART-075 Documentary Photography                           3
TOTAL UNITS FOR THE MAJOR                                30
TOTAL UNITS FOR THE DEGREE                               60

Associate of Arts Degree in Graphic Communications

REQUISITE COURSES:                                        UNITS
ART-005 Visual Arts Concepts                             3
ART-006, 7, 8 or 9 Western Art History I, II, III or IV  3
ART-010 Two-Dimensional Design Concepts                  3
ART-011 Three-Dimensional Design Concepts                3
ART-020 Introduction to Drawing (Fine Arts)              3
ART-025 Design with Adobe InDesign                      3
ART-040 Introduction to Photography                      3
ART-047 Introduction to Color Theory                      3
ART-060 Concepts of Sculpture                             3
ART-075 Documentary Photography                           3
ART-022 American Humanities                              3
ART-024 Shakespeare’s English Kings: History, Literature and Drama 3
ART-030 Modern Humanities                               3
ART-023 American Humanities                              3
ART-006, 7, 8 or 9 Visual Arts Concepts                   3
ART-007 Modernist Paris: Artists and Intellectuals       3
TOTAL UNITS FOR THE MAJOR                                24
TOTAL UNITS FOR THE DEGREE                               60

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 Photojournal*                                    3
TOTAL UNITS FOR THE MAJOR                                  30
TOTAL UNITS FOR THE DEGREE                               60

* Same Course
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

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):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-005</td>
<td>Visual Arts Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ART-010</td>
<td>Two-Dimensional Design Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ART-012</td>
<td>Design Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART-015</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>ART-025</td>
<td>Advertising, Marketing, and Publication Design</td>
<td>3</td>
</tr>
<tr>
<td>ART-072</td>
<td>Introduction to Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

AND SELECT A MINIMUM OF 12 ELECTIVE UNITS FROM:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-050</td>
<td>Designing with Adobe InDesign</td>
<td>3</td>
</tr>
<tr>
<td>ART-054</td>
<td>Adobe Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>ART-057</td>
<td>Designing with Adobe Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>ART-075</td>
<td>Documentary Photography*</td>
<td>3</td>
</tr>
<tr>
<td>ART-085</td>
<td>Introduction to Animation</td>
<td>3</td>
</tr>
<tr>
<td>ART-086</td>
<td>Animation and 3D Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ART-250</td>
<td>Introduction to Digital Art</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-110</td>
<td>Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-160</td>
<td>Photojournalism*</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS FOR THIS CERTIFICATE</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

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

* Same course

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
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An interdisciplinary course that focuses on the creative process. Course content provides an overview of visual art from a variety of cultures looked at via thematic and technical perspectives. Learning and using the vocabulary of design to analyze and evaluate art is also emphasized. Meets Art & Humanities requirement for general education. May not be repeated.

LMC: ADR: 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)
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An integrated, interdisciplinary survey of art as an aspect of cultures and civilizations from Europe, Africa and Western Asia, focusing on the Prehistoric period to 350 A.D. An Investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them, including Egypt and Mesopotamia and Persia, Greece and the Aegean and the Roman world. Meets Arts and Humanities requirement for general education. May not be repeated. (C-ID ARTH 110)

LMC: ADR: 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)
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An integrated, interdisciplinary survey of art as an aspect of cultures and civilizations in Europe 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, Late Gothic and Renaissance periods. Meets Arts and Humanities requirement for general education. May not be repeated. (C-ID ARTH 110)

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A
ART-008  Western Art History III: Art of the Early Modern World (1550 to 1920)
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
Presents art as an aspect of cultures and civilizations from Western Europe and the United States, focusing on the period from 1550 to 1920. An interdisciplinary course that investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Includes Baroque, Neoclassical, Romantic, Realist, Impressionist, Post-Impressionist and Early Modern Art. Meets Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: 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
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
Presents art as an aspect of Western Europe and the United States, focusing on the period from 1920 to the present. An interdisciplinary course that investigates how art and architecture reflect the religious, political and philosophical perspectives of the artists and societies that created them. Meets Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A

ART-010  Two-Dimensional Design Concepts
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-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. (C-ID ARTS 100)
LMC: DA
TRANSFER: UC, CSU

ART-011  Three-Dimensional Design Concepts
36 total hours lecture, 72 total hours lab
3 Units
This course is an introduction to the methods and materials of three-dimensional modeling, including construction in planar materials, both soft and rigid; forming frameworks with wire and other linear materials, modeling, carving, and casting using clay and plaster, and using found materials. This is a foundation course, presenting the fundamentals of design upon which all other courses are based, transferable to UC and CSU, and is required for all art majors. May not be repeated. (C-ID ARTS 101)
LMC: DA
TRANSFER: UC, CSU

ART-012  Design Drawing
36 total hours lecture, 72 total hours lab
3 Units
An art foundation course that introduces drawing as a visualization tool used in the process of design. Focuses on perspective drawing as a means to build the skills necessary for rapid and intuitive, but accurate drawing with application to two or three-dimensional design and problem solving, 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.
LMC: DA
TRANSFER: UC, CSU

ART-015  Graphic Design
36 total hours lecture, 72 total hours lab
3 Units
Studies and practice in two dimensional graphic design with emphasis on the definition, research and solution of applied design problems. Special emphasis will be placed on conceptualizing and integrating visual and verbal informational into unified communication concepts. Course work will explore career areas within the graphic communications industry, and will include portfolio preparation, job search and professional practices in the business world. Course assignments progressively develop the skills necessary to develop, visualize and execute concepts as finished art. May not be repeated.
LMC: DA
TRANSFER: UC, CSU
ART-016  Asian Art History
54 total hours lecture
3 Units
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. Meets Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3A

ART-017  American Art History
54 total hours lecture
3 Units
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. Meets Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ART-018  Art of the Ancient Americas
54 total hours lecture
3 Units
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 Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: Arts and Humanities, DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ART-020  Introduction to Drawing
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ART-010 or equivalent
This is a studio art course that focuses on basic drawing skills and the conventions of representational, two-dimensional art. Line, shape, value, texture, illusionistic depth, and the figure will be explored using various dry and wet drawing media. Emphasis will be on fundamental skills that the student can use in the development of a personal approach to drawing. Lectures will reflect contemporary and historical uses of drawing and its various applications within the wider field of art. “An optional material fee may be applied”. May not be repeated. (C-ID ARTS 110)
LMC: DA
TRANSFER: UC, CSU

ART-021  Intermediate Drawing
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ART-020
This is a studio art course where students begin to use their foundational skills to develop a personal approach to drawing. Line, form, value, texture, and spatial manipulation will be further explored using various dry and wet drawing media, as well as mixed media. Theory and concepts in drawing, such as abstraction, are introduced. Slides and lectures will reflect contemporary and historical uses of drawing as an art form. “An optional material fee may be applied.” May not be repeated. (C-ID ARTS 205)
LMC: DA
TRANSFER: UC, CSU

ART-025  Advertising, Marketing and Publication Design
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
Studies and practice in the techniques, tools, materials and methodology of layout, including magazines, newspapers, books, brochures and advertisements. Coursework includes the design, layout and publishing of advertising and promotional materials for printed media, with emphasis on the requirements of working with clients, art directors, illustrators, photographers and production artists. Special emphasis is placed on typography and its application, proofreading, and print specification. Instruction is computer-based using industry standard software. May not be repeated.
LMC: DA
TRANSFER: CSU
ART-030  Figure Drawing
36 total hours lecture, 72 total hours lab
3 Units
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.
LMC: DA
TRANSFER: UC, CSU

ART-035  Themes in Mesoamerican Culture through Ceramics
45 total hours lecture, 36 total hours lab
3 Units
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. Meets Arts and Humanities requirement for general education. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3B

ART-038  Introduction to Printmaking
36 total hours lecture, 72 total lab hours by arrangement
3 Units
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.
LMC: DA
TRANSFER: CSU

ART-040  Introduction to Painting
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ART-010, 012 or 020, ENGL-090
An introduction to the tools, materials and techniques of painting in oil and acrylic media. The student will select the medium of preference. This course emphasizes the process of painting, through rigorous exercises as well as longer-term assignments that apply principles presented in lectures and readings. Coursework includes studies and practice in a variety of subject matters and styles of painting, which may include still life, landscape, abstraction, fantasy, figure, and portrait studies, as well as the use of applied light and color theory, and composition. Lectures focus on painting from cultural, historical and contemporary perspectives. *An optional material fee may be applied.* May not be repeated.
LMC: DA
TRANSFER: UC, CSU

ART-041  Intermediate Painting
36 total hours lecture, 72 total hours lab
3 Units
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.
LMC: DA
TRANSFER: UC, CSU

ART-042  Introduction to Watercolor Painting
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ART-010, 20 or 40
Fundamentals of watercolor tools, materials and techniques. Tools include brushes and palettes; materials, a variety of water-based media (including liquid and cake watercolor as well as gouache) and papers for painting; techniques address brushwork, color mixing and application as transparent washes and gradients or opaque bodycolor. Students will utilize the media in a variety of genres, including still life, landscape and students’ choice of concepts. Historical examples also will be presented, discussed and researched. May not be repeated.
LMC: DA
TRANSFER: CSU
ART-047  Color Theory
36 total hours lecture, 72 total hours lab
3 Units
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. (C-ID ARTS 270)
LMC: DA
TRANSFER: UC, CSU

ART-050  Designing with Adobe InDesign
36 total hours lecture, 54 total hours lab
3 units
ADVISORY: ENGL-090
This course is an exploration of concepts of publishing, with specific application of Adobe InDesign layout software on the Apple Macintosh computer system. The course will review cover basic operating procedures and will introduce the advanced capabilities of the current version of InDesign. More than just learning about how to use the software, students will learn how to use it with a sense of design. Taught with an artistic rather than purely technical emphasis, this course provides visual training for non-artists and computer training for students already experienced in visual communications. May not be repeated.
LMC: DA
TRANSFER: CSU

ART-054  Adobe Photoshop
36 total hours lecture, 54 total hours lab
3 Units
An introduction to computer image processing. Studies and practice in the design and execution of photo manipulation, graphics, artwork and illustration using Adobe Photoshop. Students will complete successive and cumulative exercises and projects based on current industry standards and expectations. Students will concentrate on solving problems based on their understanding the principles of image processing. Taught with both artistic and technical emphases, this course addresses the needs of the current graphic communications industry and students who presently are employed or seek employment in it. May not be repeated.
LMC: DA
TRANSFER: CSU

ART-057  Designing with Adobe Illustrator
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
Studies and practice in the design and execution of graphics, artwork and illustration using Adobe Illustrator on the Apple Macintosh computer. Students will complete projects based on current industry needs as well as be able to propose projects related to their own specific needs. Students will concentrate on solving problems and creating portfolio quality pieces. Taught with an artistic and technical emphasis, this course addresses the use of vector graphics in both traditional print and the World Wide Web. May not be repeated.
LMC: DA
TRANSFER: CSU

ART-058  Designing for the Web using Adobe Dreamweaver
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
Studies and practice in web design and development. Students will concentrate on solving problems by planning and building a portfolio-quality website. Taught with an artistic and technical emphasis, students will gain a command of Dreamweaver-specific knowledge and of general web design skills such as best practices for designing a website, maintaining consistency, separating content from design, using web fonts, and utilizing HTML5 and CSS3. Students will create a responsive website that is equally functional on multiple operating systems, browser versions, configurations, and devices while demonstrating knowledge of page layout design concepts and principles of website usability, readability, and accessibility. May not be repeated.
LMC: DA
TRANSFER: CSU

ART-060  Introductory Concepts of Sculpture
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ART-011; eligibility for ENGL-090
This introductory course explores the concepts of sculpture through the use of plaster, metal, wood, and mixed media as expressive mediums. This course will emphasize self expression and development of personal imagery as well as technical aspects of working with these materials. Demonstrations and lab assignments focus on modeling, casting, carving and assembling techniques. Lectures will highlight the use of these versatile media from contemporary, cultural and historical perspectives. Students will learn and practice using sculpture terminology, as well as the vocabulary of design elements and principles. “An optional material fee may be applied.” May not be repeated.
LMC: DA
TRANSFER: UC, CSU
ART-061  Intermediate Concepts of Sculpture
36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: ART-011 and ART-060; eligibility for ENGL-090

This intermediate course explores the concepts of sculpture through the use of plaster, metal, wood, and mixed media as expressive mediums. This course will emphasize self expression and development of personal imagery as well as technical aspects of working with these materials. Demonstrations and lab assignments focus on modeling, casting, carving and assembling techniques. Lectures will highlight the use of these versatile media from contemporary, cultural and historical perspectives. Students will learn and practice using sculpture terminology, as well as the vocabulary of design elements and principles. *An optional material fee may be applied.* May not be repeated.

LMC: DA
TRANSFER: CSU

ART-062  Introduction to Ceramic Sculpture
36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: ART-011; eligibility for ENGL-090

In this course students will learn to create sculptures with clay using various tools and techniques such as slab forming, pinching, coiling and carving. Processes and tool use will be explained, demonstrated, and discussed in order to help students safely and successfully produce projects based on assigned problems and/or individualized creative plans. Students will improve their skills in representing the human figure and other subjects and will research and apply contemporary and historical examples and methods for creating ceramic sculpture. Students will learn and apply the vocabulary of the elements and principles of design, and ceramics vocabulary, to their projects. *An optional material fee may be applied.* May not be repeated.

LMC: DA
TRANSFER: CSU

ART-063  Intermediate Ceramic Sculpture
36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: ART-011, ART-062, ART-064; eligibility for ENGL-090

In this course students will learn to create sculptures with clay using various tools and techniques such as slab forming, pinching, coiling and carving. Processes and tool use will be explained, demonstrated, and discussed in order to help students safely and successfully produce projects based on assigned problems and/or individualized creative plans. Students will improve their skills in representing the human figure and other subjects and will research and apply contemporary and historical examples and methods for creating ceramic sculpture. Students will learn and apply the vocabulary of the elements and principles of design, and ceramics vocabulary, to their projects. *An optional material fee may be applied.* May not be repeated.

LMC: DA
TRANSFER: CSU

ART-064  Introduction to Ceramics Through the Pottery Wheel
36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: ART-011; eligibility for ENGL-090

This course explores the use of clay and the pottery wheel as an expressive and utilitarian medium. Lectures will highlight the use of this versatile medium from contemporary, cultural, and historical perspectives, and students will research and discuss historical examples and apply them to their projects. Pottery shapes requiring singular form components will be investigated along with an introduction to kiln firing and glaze mixing. This course will introduce development of personal imagery as well as ceramic design, decoration, and glazing. Lab assignments focus on throwing techniques and glazing. Students will purchase clay and tools. *An optional material fee may be applied.* May not be repeated.

LMC: DA
TRANSFER: CSU
ART-065  Intermediate Ceramics Through the Pottery Wheel

36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: ART-011 and ART-064; eligibility for ENGL-090

This course further develops the use of clay and the pottery wheel as an expressive and utilitarian medium. Lectures will highlight the use of this versatile medium from contemporary, cultural, and historical perspectives, and students will research assigned and student-chosen historical examples and apply the research to their projects. Pottery shapes requiring singular and multiple form components will be investigated along with kiln firing and glaze mixing and calculation. This course will continue development of personal imagery and concepts of ceramic design, decoration, and glazing. Lab assignments focus on throwing techniques and glazing. Students will purchase clay and tools. "An optional material fee may be applied." May not be repeated.

LMC: DA
TRANSFER: CSU

ART-072  Introduction to Digital Photography

36 total hours lecture, 54 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-090

Studies and practice in digital photography. This course will explore the technical areas of f-stop and shutter speed, exposure and lighting, the artistic concepts of balance, and composition as well as the communications possibilities of the medium. Students will complete projects designed to help them learn to solve their own photographic problems. Students will concentrate on solving problems and creating portfolio quality pieces. Taught with an artistic and technical emphasis, this course addresses the use of digital cameras, scanners and computers in creating high quality photographs. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ART-073  Location Photography

9 total hours lecture, 27 total hours lab
1 Unit

ADVISORY: Beginning photography course or equivalent

This course covers studies and practice in photographing on location, including landscapes, cityscapes, people in action and events. Students will create photographs concentrating on composition, technique, and capturing a mood. Students must supply their own adjustable digital camera and media cards. May not be repeated.

LMC: DA
TRANSFER: CSU

ART-074  Photo II: Developing a Personal Vision

36 total hours lecture, 54 total hours lab
3 Units

PREREQUISITE: ART-072

This course presents a methodical approach to creating high-quality photographs through the study and practice of photography. Coursework includes technical areas of lighting, exposure, and image processing using Photoshop. Additional attention is given developing photographic styles and approaches, and the affect of technology on photography. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ART-075  Documentary Photography

36 total hours lecture, 54 total hours lab
3 Units

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.

LMC: DA
TRANSFER: UC, CSU

ART-085  Introduction to Animation

36 total hours lecture, 72 total hours lab
3 Units

Studies and practice in three-dimensional computer-based animation with emphasis on the definition of, research for, and solutions to animation problems. Includes basic history of animation. Using industry standard routines and analyses, this course develops students’ understanding of motion and visual effects generated in 3D scenes. Special emphasis will be placed on animation styles, production pipelines, and story development. May not be repeated.

LMC: DA
TRANSFER: UC, CSU
ART-086  Animation and 3D Modeling
36 total hours lecture, 72 total hours lab
3 Units
Studies and practice in three dimensional animations with emphasis on the definition, research, solution to animation and modeling problems. Using industry standard routines and analysis, this course develops students’ understanding of motion and visual effects generated in 3D scenes to develop a demo reel by the end of the course. This course is not about learning “how to” use a specific program but learning the basic 3D modeling and animation concepts to emphasizes creativity. Special emphasis will be placed on stylized modeling and animation, production pipelines, and story development. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

ART-098  Independent Study in Art
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

ART-170  Occupational Work Experience Education in Art
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

ART-180  Internship in Art
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

ART-250  Introduction to Digital Art
36 total hours lecture, 54 total hours lab
3 Units
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.
LMC: DA
TRANSFER: UC, CSU

ART-900s  Selected Topics in Art
DA varies with course content.
Astronomy

COURSE DESCRIPTIONS

ASTRO-010  Introduction to Astronomy
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
A survey of current concepts of the Universe and their historical evolution. Emphasis is placed on the 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 for Pittsburg sections. Interdisciplinary connections, ethical implications, and multicultural perspectives are infused throughout the course. May not be repeated.
LMC: ADR: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B1; IGETC Area 5A

ASTRO-011  Astronomy Laboratory
54 total hours lab
1 Unit
PREREQUISITE: Prior or concurrent enrollment in ASTRO-010
ADVISORY: Eligibility for ENGL-100
This course provides laboratory experience in astronomical observation. It involves the study of fundamental concepts of astronomy, including investigations of the moon, sun, planets and stars and offers practical experience in the use of telescopes and other tools. ASTRO-010 and ASTRO-011, if both completed, meet the CSU lab science requirement. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B3; IGETC Area 5A, 5C

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.
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

ATH-006  Fitness for Athletic Competition
54-108 total hours activity
1-2 Units
ADVISORY: High school athletic experience
This course is designed to introduce the athlete to the elements, understanding and knowledge of athletic physical training for competition. Course activities will include endurance running, interval sprinting, weight training and plyometric training to improve one's level of fitness for the upcoming athletic season. May be repeated three times.
LMC: DA
TRANSFER: UC, CSU

ATH-008  Strength and Weight Training for Athletes
54 total hours activity
1 Unit
ADVISORY: High school athletic experience
This course includes instruction in all elements of weight training for student athletes. It includes weight training techniques, safety procedures, knowledge of muscle groups, equipment use, warm-up, strength and endurance training, exercise progression and improved fitness. May be repeated three times.
LMC: DA
TRANSFER: UC, CSU

ATH-014  Advanced Volleyball Skills for Athletes
108 total hours activity
2 Units
ADVISORY: High school volleyball or club experience recommended
This course is designed to prepare the student for competition in the California Community College Volleyball season and upon completion be able to transfer to a 4 year university. Intercollegiate volleyball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.
LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Activity Hours</th>
<th>Units</th>
<th>Advisory</th>
<th>Description</th>
<th>LMC</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
<tr>
<td>ATH-066</td>
<td>Advanced Softball Skills for Athletes</td>
<td>108</td>
<td>2</td>
<td></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.</td>
<td>DA</td>
<td>UC, CSU</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.</td>
<td>DA</td>
<td>UC, CSU</td>
</tr>
</tbody>
</table>
ATH-077    Intercollegiate Football
175 total hours activity
3 Units
ADVISORY: ATH-006, 008, 027 or 028; High school football experience

Intercollegiate football provides the opportunity for competition as a member of an LMC team in conference play which includes championship playoffs. May be repeated three times.

LMC: DA
TRANSFER: UC, CSU

ATH-090    Intercollegiate Basketball for Women
175 total hours activity
3 Units
ADVISORY: High school basketball or club experience recommended

Intercollegiate women’s basketball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.

LMC: DA
TRANSFER: UC, CSU

ATH-079    Intercollegiate Basketball for Men
175 total hours activity
3 Units
ADVISORY: High school basketball or club experience recommended

Intercollegiate basketball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.

LMC: DA
TRANSFER: UC, CSU

ATH-081    Intercollegiate Baseball
175 total hours activity
3 Units
ADVISORY: High school baseball or club experience recommended

Intercollegiate baseball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.

LMC: DA
TRANSFER: UC, CSU

ATH-089    Intercollegiate Soccer
175 total hours activity
3 Units
ADVISORY: High school soccer or club experience recommended

Intercollegiate soccer provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.

LMC: DA
TRANSFER: UC, CSU

ATH-092    Intercollegiate Softball
175 total hours activity
3 Units
ADVISORY: High school softball experience recommended

Intercollegiate softball provides the opportunity for competition as a member of an LMC team in conference play, which includes a state championship playoff. Students are eligible to participate for 2 seasons at the community college level. May be repeated three times.

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

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

ATH-180  Internship in Athletics

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: 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
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>Title</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>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 18-24

TOTAL UNITS FOR THE DEGREE 60

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

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

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:  
- AUTO-047 Automotive Heating & Air Conditioning 3
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:  
- 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:  
- 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:  
- 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:  
- 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 & A5) required for employment in the automotive field.
AUTO-035  Automotive Fundamentals
54 total hours lecture, 72 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
The course is designed to give both theory and practical hands-on training for rebuilding and diagnosing four stroke engines. The skills taught include machining, engine rebuilding, and their service and repair. This course is a good foundation for automotive technicians. May not be repeated.
LMC: DA
TRANSFER: CSU

AUTO-037  Automotive Engine Machining
36 total hours lecture, 108 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
The course teaches students how to diagnose, rebuild and machine a modern automotive engine. This course is designed for students seeking a career as an automotive technician. It prepares students for the A.S.E. M1, M2 and M3 Examination. May not be repeated.
LMC: DA
TRANSFER: CSU

AUTO-038  Introduction to Diesel Technology
54 total hours lecture, 72 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
This course is designed to introduce students to light duty automotive and truck diesel engine systems. They will learn the differences and advantages of diesel vs. gas engines, as well as the skills necessary to properly diagnose and repair modern high pressure diesel engines and fuel systems. It will provide students new to diesel technology a solid working knowledge of modern diesels, and is a valuable refresher for current automotive technicians that may not be up to date on the latest diesel technology. It will prepare students for the ASE T2 diesel examination. May not be repeated.
LMC: DA
TRANSFER: CSU

AUTO-040  Automotive Engine Diagnosis I
36 total hours lecture, 108 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
This course provides a practical background in the theory, operation, and testing of automotive engine systems and emission control components. This is the first of two courses (AUTO-040 and AUTO-041) designed to familiarize the student with engine systems. It will prepare students for the ASE A-6 Examination. May not be repeated.
LMC: DA
TRANSFER: CSU

AUTO-041  Automotive Engine Diagnosis II
36 total hours lecture, 108 total hours lab
4 Units
ADVISORY: AUTO-040; eligibility for ENGL-090
This advanced course is the second of two courses on tune-ups and diagnostics. The course is designed to give students the ability to gain and refine the skills necessary to perform engine tune-ups and diagnostic techniques on late model vehicles. The course places emphasis on manufacturer’s standards and procedures required to keep the automobile engine performing within state and federal specifications. It course prepares students for the ASE A-8 Examination. May not be repeated.
LMC: DA
TRANSFER: CSU

AUTO-042  Automotive Brakes
36 total hours lecture, 108 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
This course is designed to give students the knowledge, and practical skills necessary to troubleshoot, diagnose and repair modern automotive brakes and ABS systems. The course places emphasis on manufacturers’ standards and procedures required to keep brakes performing within state and federal specifications. This course will prepare students for the California Brake Installer’s License exam and the ASE A-5 Examination. May not be repeated.
LMC: DA
TRANSFER: CSU
### AUTO-043 Automotive Suspension and Steering

36 total hours lecture, 108 total hours lab
4 Units

**ADVISORY:** Eligibility for ENGL-090

The course is designed for students to learn and improve the skills necessary to diagnose and repair wheels, tires, shocks, steering, suspension systems and alignment procedures. The course places emphasis on the manufacturer’s standards and procedures. This course will prepare students for the ASE A-4 Examination. May not be repeated.

LMC: DA  
TRANSFER: CSU

### AUTO-045 Automotive Laboratory Practice

72 total hours lab
1.5 Units

This course is designed for students who want to improve their existing skills. More lab time is very valuable in improving skills to gain employment in the automotive field. Projects will vary depending on the student’s need. Work can include electrical and mechanical diagnosis and repair. Students must be able to perform repairs based on their current knowledge of the repair, with supervision from the instructor. May not be repeated.

LMC: DA  
TRANSFER: CSU

### AUTO-046 Automotive Electricity and Electronics

36 total hours lecture, 108 total hours lab
4 Units

**ADVISORY:** Eligibility for ENGL-090

The course covers automotive electrical principles including reading wiring diagrams, diagnosing electronic components, and using meters/lab scopes. This course is designed for the student seeking a career as an automotive technician as well as the existing technicians who want to expand their knowledge. This course will prepare students to take the California Automotive Lamp Installer’s license and the ASE A-6 Examination. May not be repeated.

LMC: DA  
TRANSFER: CSU

### AUTO-047 Automotive Heating and Air Conditioning

36 total hours lecture, 54 total hours lab
3 Units

**ADVISORY:** Eligibility for ENGL-090

This course is designed to provide students with the knowledge and skills needed to succeed in the field of automotive heating and air conditioning; and retrofitting R12 to R134a systems. This course will prepare students to take the federal exam for a refrigerant handling license and the ASE A-7 Examination. May not be repeated.

LMC: DA  
TRANSFER: CSU

### AUTO-048 Automatic Transmission and Transaxles

36 total hours lecture, 108 total hours lab
4 Units

**ADVISORY:** Eligibility for ENGL-090

This course is designed to provide students with the knowledge and skills to maintain and repair automotive transmissions and transaxles. This course provides experience in complete overhaul and rebuilding of automatic transmissions. It prepares students for the ASE A2 Examination. May not be repeated.

LMC: DA  
TRANSFER: CSU

### AUTO-049 Manual Transmission and Differential

36 total hours lecture, 108 total hours lab
4 Units

**ADVISORY:** Eligibility for ENGL-090

The course is designed to provide students with the knowledge and ability to diagnose and rebuild a manual transmission, clutch, transaxle, driveshaft and differential. Students will gain knowledge and skill in the theory, operation and inspection of manual transmission and transaxle systems. Students will learn diagnostic skills necessary to trouble shoot, repair and adjust most modern manual transmission and transaxle systems. It will prepare students for the ASE A-5 Examination. May not be repeated.

LMC: DA  
TRANSFER: CSU
**AUTO-055  Clean Air Car Course + OBD II**

36 total hours lecture, 48 total hours lab
3 Units

**ADVISORY:** AUTO-040 and 041

This course is designed for students seeking a career in 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.

**LMC:** DA

**AUTO-056  Advanced Level Smog Training**

14 total hours lecture, 22 total hours lab
1 Unit

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

This course is required by the State of California Bureau of Automotive Repair (B.A.R.) for automotive technicians to complete their education requirements for the state smog license certification. This course provides a practical background in the theory, operation, and testing of automotive engine systems and emission control components. May not be repeated.

**LMC:** DA

**AUTO-057  Smog Update**

8 total hours lecture, 12 total hours lab
.5 Units

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

The State of California mandates that all smog technicians renew their licenses every two years. This course is the latest update offered by the California Bureau of Automotive Repair for smog technicians who need to renew their license. May not be repeated.

**LMC:** DA

**AUTO-098  Independent Study in Automotive Technology**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

**AUTO-170  Occupational Work Experience Education in Automotive Technology**

60-300 total hours
1-4 Units

**PREREQUISITE:** Approved online application

**ADVISORY:** Eligibility for ENGL-090

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

**LMC:** DA

**TRANSFER:** CSU

**AUTO-180  Internship in Automotive Technology**

60-300 total hours
1-4 Units

**PREREQUISITE:** Approved online application and employer placement

**ADVISORY:** Eligibility for ENGL-090

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

**LMC:** DA

**TRANSFER:** CSU

**AUTO-900s  Selected Topics in Automotive Technology**

DA varies with course content.
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: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</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>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

AND SELECT A MINIMUM OF 8 UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<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>
<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-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>
<td>4</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 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.

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
54 total hours lecture, 18 total hours lab
3 Units

This is an introductory course that covers the biological concepts and principles underlying human health and fitness. We will cover not only the basic functions of the human cardiovascular, respiratory, nervous, digestive, immune, and reproductive systems, but also the effects of diet, exercise, prescription, 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 resulting health consequences will also be emphasized. Hands-on assignments will serve to demonstrate concepts that are critical to the health and wellbeing of the whole individual. May not be repeated.

LMC: ADR: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area E
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Transferability</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-007</td>
<td>Ecology and the Environment</td>
<td>4</td>
<td>54</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C</td>
</tr>
<tr>
<td>BIOSC-008</td>
<td>Human Biology</td>
<td>4</td>
<td>54</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C</td>
</tr>
<tr>
<td>BIOSC-010</td>
<td>General Biology</td>
<td>4</td>
<td>72</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C</td>
</tr>
<tr>
<td>BIOSC-020</td>
<td>Principles of Biology: Cellular</td>
<td>5</td>
<td>108</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C</td>
</tr>
<tr>
<td>BIOSC-021</td>
<td>Principles of Biology: Organismal</td>
<td>5</td>
<td>108</td>
<td>UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C</td>
</tr>
<tr>
<td>BIOSC-030</td>
<td>Introduction to Anatomy and Physiology</td>
<td>4</td>
<td>54</td>
<td>UC, CSU</td>
</tr>
</tbody>
</table>

ADVISORY:
- ENGL-090
- Eligibility for ENGL-090 or higher; Math-012 or higher
- MATH-029, MATH-030 or equivalent

TRANSFER:
- UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C
- UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C
- UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C
- UC, CSU

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

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.

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, 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.

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 employed throughout the course. Laboratory methods, techniques and field work will be included with all major topics. May not be repeated.

This is designed to cover basic anatomy and physiology. Fundamentals of body structure and function and the elegant inter-relationships 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.
BIOSC-040  Human Anatomy
54 total hours lecture, 108 total hours lab
5 Units
ADVISORY: BIOSC-030 or equivalent
This course is a comprehensive exploration of gross and microscopic anatomy from cellular to systems that presents the human body as an integrated organism. Extensive dissection of human cadavers and preserved animal organs will constitute the bulk of the lab. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C

BIOSC-045  Human Physiology
54 total hours lecture, 108 total hours lab
5 Units
ADVISORY: BIOSC-040 and CHEM-007
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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C

BIOSC-050  Microbiology
36 total hours lecture, 108 total hours lab
4 Units
PREREQUISITE: CHEM-006, 007, 008, 020, 021 or 025, or equivalent
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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B2, B3; IGETC Area 5B, 5C

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.
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

COLLEGE SKILLS CERTIFICATES
Fundamental Business Skills

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 earn the Associate in Science in Business Administration for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education-Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

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>
</tbody>
</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>

LIST B - SELECT TWO OF THE FOLLOWING OR ONE OF THE MATH CLASSES NOT ALREADY USED IN LIST A AND ONE OF THE FOLLOWING:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-109</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS-059</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-040</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 26-28

TOTAL UNITS FOR THE DEGREE 60

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.

REQUISITE COURSES: UNITS
| BUS-185 | Computer Assisted Accounting | 3 |
| BUS-186 | Financial Accounting | 4 |
| BUS-187 | Managerial Accounting | 4 |
| BUS-018 | Microsoft Excel for Windows | 3 |
| BUS-109 | Introduction to Business+ | 3 |
| TOTAL UNITS | 17 |

AND SELECT A MINIMUM OF 6 UNITS FROM:
| BUS-027 | Small Business Management | 3 |
| BUS-294 | Business Law+ | 3 |
| BUS-059 | Business Communications | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | 3 |
| BUS-092 | Business Ethics | 5 |
| BUS-093 | Dealing with Difficult People | 5 |
| BUS-095 | Developing Customer Service Satisfaction | 5 |
| BUS-096 | Time Management and Goal Setting | 5 |
| BUS-160 | Personal Finance | 3 |
| BUS-170*** | OWEES in Business | 1-2 |
| BUS-900**** | Selected Topics in Business | varies |
| TOTAL UNITS FOR THE MAJOR | 23 |

TOTAL UNITS FOR THE DEGREE: 60

TOTAL UNITS FOR THIS CERTIFICATE: 23

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

Program Student Learning Outcomes
1. Demonstrate the knowledge and skills necessary for an entry level position in public and/or private accounting.
2. Analyze information from source documents and narratives and record in the proper accounting records the typical types of financial transactions encountered daily by a for profit business.
3. Construct financial statements and reports from accounting records.

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.

REQUISITE COURSES: UNITS
| BUS-181 | Accounting: Applied Principles | 3 |
| or | BUS-186 | Financial Accounting | 4 |
| BUS-027 | Small Business Management | 3 |
| BUS-035 | Microsoft Office | 3 |
| or | BUS-035 A/B/C | Microsoft Word/Excel/PowerPoint | 4.5 |
| MANGT-075 | Managing Human Resources | 3 |
| TOTAL UNITS | 12-14.5 |

AND SELECT A MINIMUM OF 17 UNITS: DEGREE; OR 12 UNITS- CERTIFICATE FROM:
| BUS-285 | Tax Accounting | 3 |
| BUS-018 | Microsoft Excel for Windows | 3 |
| BUS-109 | Introduction to Business | 3 |
| BUS-294 | Business Law | 3 |
| BUS-029 | QuickBooks | 3 |
| BUS-058 | Business English | 3 |
| BUS-059 | Business Communications | 3 |
| BUS-091 | Managing/Working in a Diverse Workforce | 3 |
| BUS-092 | Business Ethics | 3 |
| BUS-093 | Dealing with Difficult People | 3 |
| BUS-095 | Developing Customer Service Satisfaction | 3 |
| BUS-096 | Time Management and Goal Setting | 3 |
| BUS-160 | Personal Finance | 3 |
| BUS-185 | Computer Assisted Accounting | 3 |
| BUS 900*** | Selected Topics in Business | varies |
| ART-015 | Graphic Design | 3 |
| COMSC-030 | Web Site Development-Part 1 | 1.5 |
| COMSC-031 | Web Site Development-Part II | 1.5 |
| COMSC-060 | Emerging Microcomputer Technologies | 4 |
| JOURN-100 | Mass Communication | 3 |
| MANGT-050 | Introduction to Supervision | 3 |
| MANGT-060 | Making Effective Decisions | 3 |
| MANGT-065 | Mastering Management's Essential Tools | 3 |
| MANGT-070 | Relating in Human Terms | 3 |
| TOTAL UNITS FOR THE MAJOR | 29-31.5 |
**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.

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-018  Microsoft Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BUS-047  Office Procedures and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS-059  Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS-065  Word Processing with MS Word</td>
<td>3</td>
</tr>
<tr>
<td>BUS-091  Managing/Working in a Diverse Workforce</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-092  Business Ethics</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-093  Dealing with Difficult People</td>
<td>.5</td>
</tr>
<tr>
<td>BUS-095  Developing Customer Service Satisfaction</td>
<td>.5</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>14</td>
</tr>
</tbody>
</table>

**SELECT A MINIMUM OF ANY 10 UNITS FROM COURSES BELOW:**

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

**TOTAL UNITS FOR THE MAJOR**

**TOTAL UNITS FOR THIS CERTIFICATE**

**TOTAL UNITS FOR THE DEGREE**

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

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  
BUSINESS—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</td>
<td>Business Math</td>
</tr>
<tr>
<td>or higher</td>
<td></td>
</tr>
<tr>
<td>BUS-181</td>
<td>Accounting: Applied Principles</td>
</tr>
<tr>
<td>BUS-186</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUS-026a</td>
<td>Retailing Operations</td>
</tr>
<tr>
<td>BUS-033a</td>
<td>Marketing</td>
</tr>
<tr>
<td>BUS-035</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BUS-035A/C</td>
<td>Microsoft Office Word/Powerpoint</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BUS-018</td>
<td>Microsoft Excel for Windows</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>COMSC-040</td>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>BUS-059</td>
<td>Business Communications</td>
</tr>
<tr>
<td>MANGT-050</td>
<td>Introduction to Supervision</td>
</tr>
<tr>
<td>MANGT-070</td>
<td>Relating in Human Terms</td>
</tr>
<tr>
<td>MANGT-075</td>
<td>Managing Human Resources</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THIS CERTIFICATE  
27-29

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

b Currently not offered at LMC, can be taken at Las Positas (Marketing 60).

Program Student Learning Outcomes

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

COLLEGE SKILLS CERTIFICATE  
BUSINESS—FUNDAMENTAL BUSINESS SKILLS

REQUIRED COURSES:  

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-003</td>
<td>Business Math</td>
</tr>
<tr>
<td>BUS-035</td>
<td>Microsoft Office</td>
</tr>
<tr>
<td>BUS-051</td>
<td>Keyboarding</td>
</tr>
<tr>
<td>BUS-055</td>
<td>Typing Speed/Accuracy Development</td>
</tr>
<tr>
<td>BUS-058</td>
<td>Business English</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE  
11

Program Student Learning Outcomes

1. Demonstrate the knowledge and skills necessary to obtain an entry level business office position.

COURSE DESCRIPTIONS

BUS-001  
Civil Litigation for Legal Secretaries

54 total hours lecture  
3 Units

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

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

LMC: DA  
TRANSFER: CSU

BUS-002  
Legal Office Procedures and Records Management

54 total hours lecture  
3 Units

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

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

LMC: DA  
TRANSFER: CSU
BUS-003  Business Math
54 total hours lecture, 18 total hours lab
3 Units

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

LMC: DA
TRANSFER: CSU

BUS-018  Microsoft Excel for Windows
54 total hours lecture, 18 total hours lab
3 Units

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

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

LMC: DA
TRANSFER: CSU

BUS-027  Small Business Management
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-090

A review of the organization and operation of small business in this country, with particular attention to the overview of small business, starting a new venture, and managing the ongoing venture. The course is designed for those students who desire to enter or who are now involved in small business management. The emphasis is on the practical, “real world” aspects of planning, setting up, and operating a small business. May not be repeated.

LMC: DA
TRANSFER: CSU

BUS-029  QuickBooks
27 total hours lecture, 27 total hours lab
2 Units

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

This two-unit course introduces QuickBooks accounting software. QuickBooks is an easy-to-use commercial accounting system for small to medium size businesses. Topics include how to invoice customers for services and merchandise; how to order and track products; how to enter and pay vendors’ bills; how to make deposits and reconcile bank accounts; how to generate company reports and graphs; and how to set up a new company or to computerize an existing company. May not be repeated.

LMC: DA
TRANSFER: CSU

BUS-035  Microsoft Office
54 total hours lecture, 18 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-090

Business 035 is a skills/performance-based class that provides the student the opportunity to learn the basic and intermediate features of 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.

LMC: DA
TRANSFER: CSU

BUS-035A  Microsoft Word
18 total hours lecture, 27 total hours lab
1.5 Units

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU
BUS-035B  Microsoft Excel
18 total hours lecture, 27 total hours lab
1.5 Units
ADVISORY: BUS-003 or equivalent math skills
Business 35B is a skills/performance-based class that provides students the opportunity to learn the basic features of one of the most vital and widely used spreadsheet programs - Microsoft Excel. Students learn how to create, edit, and format common business and personal spreadsheet documents such as budgets, invoices, expense reports, balance sheets, and other basic financial reports, how to use basic math formulas/functions in Excel, and how to create basic charts. May not be repeated.
LMC: DA
TRANSFER: CSU

BUS-035C  Microsoft Powerpoint
18 total hours lecture, 27 total hours lab
1.5 Units
ADVISORY: Eligibility for ENGL-090
Business 35C is a skills/performance-based class that provides students the opportunity to learn the basic and intermediate features of one of the most widely used graphic presentation programs, Microsoft PowerPoint, to create common business and personal presentations. Students learn how to create and edit slide shows; enhance slides with sound, graphics, and animation; create and use custom templates, and prepare presentations for various types of delivery. May not be repeated.
LMC: DA
TRANSFER: CSU

BUS-045  Office Accounting Essentials
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: Completion of other courses in the Certificate- BUS-018, BUS-080 & BUS-181; BUS-003; eligibility for ENGL-090
This course enables students to learn the accounting clerical processes (payables, receivables & payroll) from beginning to end. It presents theory and regulations with hands-on application for accounting functions both manually and computerized. This course focuses on the payables, billing and payroll cycles: purchase order creation, receiving, vendor invoice verification, coding, and payment; customer billing, credit, and collections; preparation of gross payroll, deductions, net pay, employer’s taxes, journal entries, and tax deposits; preparation of monthly, quarterly and annual tax statements/reports; corrections to tax statements; electronic tax deposits; and compliance record keeping. Both federal and California compliance topics are covered, along with the accompanying forms. Some industry specific issues are also addressed; prevailing wage, union fringe benefits, tips, and self-employment. May not be repeated.
LMC: DA
TRANSFER: CSU

BUS-047  Office Procedures and Records Management
54 total hours lecture
3 Units
ADVISORY: BUS-051 OR concurrent enrollment in BUS 51 OR Typing @ 25 WPM; BUS-035 OR concurrent enrollment in BUS-035 OR MS Office Proficiency; eligibility for ENGL-090
This course introduces students to the administrative responsibilities of a 21st century office. Students prepare business correspondence, plan/deliver oral presentations, and learn administrative office procedures (processing mail, telephone etiquette, making travel arrangements, scheduling appointments, planning meetings and conferences, etc.), along with time management, job search, interpersonal, and organizational skills. Emphasis is placed on career assessment, career preparation, records management, and the importance of developing "soft" skills. May not be repeated.
LMC: DA
TRANSFER: CSU

BUS-051  Keyboarding
9 total hours lecture, 18 total hours lab
1 Unit
This course enables the student to develop the skills necessary to operate the computer keyboard with ease and by "touch," and to develop a net typing speed of up to 30 gross words per minute. May not be repeated.
LMC: NDA

BUS-052  Introduction to Entrepreneurship
54 total hours lecture
3 Units
This course allows students to develop an understanding of the complex tasks faced by individuals engaged in entrepreneurial activities. The course identifies the methods for developing a business idea, the key aspects of creating a business plan, how to acquire resources and how to start a business. May not be repeated.
LMC: DA
TRANSFER: CSU

BUS-055  Typing Speed/Accuracy Development
9 total hours lecture, 18 total hours lab
1 Unit
ADVISORY: Demonstrated keyboarding speed of 30 GWAM (gross words a minute)
This course is designed to improve typing skills (keyboard proficiency, typing speed and accuracy) through individualized skill analysis and drills designed to correct keyboarding weaknesses. The course also includes numerous five minute timed writings to prepare student for "pre-employment" testing. May not be repeated.
LMC: NDA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-058</td>
<td>Business English</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course emphasizes grammar, spelling, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>vocabulary as applied to business communication.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>It prepares students to write and communicate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>effectively by developing written skills in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>sentence and paragraph structures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and analyzing business e-mail, memos, letters,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and other types of routine business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>correspondence. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-059</td>
<td>Business Communications</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Prior or concurrent enrollment in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUS-058 or equivalent; eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presents theory and practical application of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>effective written and oral communications;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>students learn to compose e-mail, letters, memos</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and reports; learn to network and identify</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>other successful job strategies; prepare</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>resumes and improve interviewing skills; learn to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>be a successful and productive team member and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>leader. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-065</td>
<td>Word Processing with MS Word</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Prior or concurrent enrollment in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUS-051 OR Typing@25WPM; eligibility for</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This is a hands-on word processing course that</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>covers fundamental to intermediate-level MS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word features and functions in the Windows</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>environment. Students will create, edit, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>format professional memos, letters, and reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>of varying complexity and plan, research,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>write, revise documents (tables, flyers,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>brochures, etc.) to meet specific information</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>needs. The class emphasizes using Word as a</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>tool for business applications. Students will</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>develop business problem-solving skills and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>increase their MS Windows file management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>proficiency. This course prepares students for</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>entry-level employment opportunities and will</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>equip them to use Word in college-level courses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-080</td>
<td>Ten-Key / Data Entry Skills</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>BUS-081</td>
<td>Office Accounting Essentials - Accounts</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Receivable &amp; Accounts Payable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Completion of the other courses in the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>certificate: BUS-018, BUS-080, BUS-181 and BUS-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>003; eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course is designed to enable students to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>develop proper ten-key technique, a necessary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>skill for the accounting and business</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>vocation. Students work at an independent pace</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>applying techniques learned to the computer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>numeric keypad. The course focuses on proper</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>posture, correct fingering, and accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speed will develop as technique is learned.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course satisfies both degree and certificate</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>electives within the Business Area and is</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>recommended to be taken before enrolling in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BUS-045, BUS-081 and BUS-082. May not be</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LMC: DA
TRANSFER: CSU
BUS-082 Payroll I
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: Completion of the other courses in the certificate: BUS-018, BUS-080, BUS-181 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 non-tax 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
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: BUS-086; eligibility for ENGL-090

This course is designed to introduce coding knowledge and enhance coding skills by addressing specific coding issues within a particular area. ICD-9CM, diagnostic coding, a preview of ICD-10, and CPT coding are discussed. CPT coding is discussed in-depth. May not be repeated.

LMC: DA
TRANSFER: CSU

BUS-084 Medical Office Procedures and Records Management
27 total hours lecture, 27 total hours lab
2 Units
ADVISORY: BUS-051 OR concurrent enrollment in BUS 51, OR Typing @ 25 WPM; BUS-035 OR concurrent enrollment in BUS 35, OR MS Office proficiency; eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

BUS-086 Medical Terminology
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

BUS-087 Medical Transcription I
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: BUS-086; eligibility for ENGL-090; word processing at 40 wpm

This course is an introduction to the practice of medical transcription. Students learn to apply special formatting and learn additional medical terminology while transcribing dictation for a variety of medical specialties. Using industry-standard tools and reference materials, students learn to type, proofread, and edit medical reports for accuracy. HIPAA regulations and the confidentiality of medical documents are emphasized. May not be repeated.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-088</td>
<td>Patient Billing/Accounting</td>
<td>2</td>
<td>36+18</td>
<td>CSU</td>
</tr>
<tr>
<td>BUS-089</td>
<td>Medical Law and Ethics for the Medical Office</td>
<td>1</td>
<td>18</td>
<td>CSU</td>
</tr>
<tr>
<td>BUS-090</td>
<td>Advanced Patient Billing</td>
<td>2</td>
<td>36+18</td>
<td>CSU</td>
</tr>
<tr>
<td>BUS-091</td>
<td>Managing and Working in a Diverse Workplace</td>
<td>.5</td>
<td>8</td>
<td>CSU</td>
</tr>
<tr>
<td>BUS-092</td>
<td>Business Ethics</td>
<td>.5</td>
<td>8</td>
<td>CSU</td>
</tr>
<tr>
<td>BUS-093</td>
<td>Dealing with Difficult People</td>
<td>.5</td>
<td>8</td>
<td>CSU</td>
</tr>
</tbody>
</table>
BUS-095  Developing Customer Service Satisfaction

8 total hours lecture
.5 Unit

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: UC, CSU

BUS-096  Time Management and Goal Setting

8 total hours lecture
.5 units

ADVISORY: Eligibility for ENGL-090

The primary goal of this course is to help students set goals, and recognize and apply time management principles and techniques. Students analyze their professional and personal commitments and identify methods that they can utilize to facilitate change and improvement. May not be repeated.

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.

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

BUS-109  Introduction to Business

54 total hours lecture
3 Units

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

A contemporary overview of major topics and main fields in business: marketing, managing, accounting, law, entrepreneurship, international trade, information and risk 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. (C-ID BUS-110)

LMC: DA
TRANSFER: CSU

BUS-160  Personal Finance

54 total hours lecture, 18 total hours lab
3 Units

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

This is an introductory personal finance course designed to help students become financially literate, and to learn decision-making strategies integral in controlling one’s financial destiny. The course covers the following topics: steps in building a personal financial plan; goal setting; budgeting; evaluating financial institution services; consumer credit; life’s major purchases; insurance types, needs and products; investing basics, equity and debt vehicles; income tax strategies; and retirement and estate planning. May not be repeated.

LMC: DA
TRANSFER: CSU

BUS-170  Occupational Work Experience Education in Business

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours/Lab</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-180</td>
<td>Internship in Business</td>
<td>60-300 total hours</td>
<td>1-4</td>
<td>PREREQUISITE: Approved online application and employer placement</td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
</tr>
<tr>
<td>BUS-181</td>
<td>Accounting: Applied Principles</td>
<td>54 total hours lecture, 18 total hours lab</td>
<td>3</td>
<td>ADVISORY: BUS-003, MATH-012; eligibility for ENGL-090</td>
<td></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.</td>
</tr>
<tr>
<td>BUS-185</td>
<td>Computer Assisted Accounting</td>
<td>36 total hours lecture, 54 total hours lab</td>
<td>3</td>
<td>ADVISORY: BUS-018; BUS-181 or BUS-186; eligibility for ENGL-100</td>
<td></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.</td>
</tr>
<tr>
<td>BUS-186</td>
<td>Financial Accounting</td>
<td>72 total hours lecture</td>
<td>4</td>
<td>ADVISORY: BUS-181; MATH-012 or BUS-003; eligibility for ENGL-090</td>
<td></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. (C-ID ACCT 110)</td>
</tr>
<tr>
<td>BUS-187</td>
<td>Managerial Accounting</td>
<td>72 total hours lecture</td>
<td>4</td>
<td>PREREQUISITE: BUS-186</td>
<td></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 (C-ID ACCT 120)</td>
</tr>
<tr>
<td>BUS-285</td>
<td>Tax Accounting</td>
<td>54 total hours lecture</td>
<td>3</td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></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.</td>
</tr>
</tbody>
</table>
BUS-294 Business Law
54 total hours lecture
3 Units
ADVISORY: BUS-109; eligibility for ENGL-100
This course includes a study of the legal environment of business and the basic principles of business law. Included are contracts, agency, employment, sales, property, forms of ownership, courts, and court procedures. May not be repeated. (C-ID BUS 120)
LMC: DA
TRANSFER: UC, CSU

BUS-900s Selected Topics in Business
DA varies with course content.

Chemistry

DEGREE–Associate of Science
Chemistry

For the Associate of Science Degree in Chemistry, complete the coursework listed below as well as the General Education 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.

REqUIRED COURSES: UNITS
CHEM-025 General College Chemistry 5
CHEM-026 General College Chemistry 5
CHEM-028 Organic Chemistry 5
CHEM-029 Organic Chemistry 5
MATH-050 Calculus and Analytic Geometry I 4
MATH-060 Calculus and Analytic Geometry II 4
MATH-070 Calculus and Analytic Geometry III 4
PHYS-040 Physics for Scientists and Engineers I 4
PHYS-041 Physics for Scientists and Engineers II 4
PHYS-042 Physics for Scientists and Engineers III 4

TOTAL UNITS FOR THE MAJOR 44

TOTAL UNITS FOR THE DEGREE 60

RECOMMENDED ELECTIVE COURSES:
MATH-075 Linear Algebra 3
MATH-080 Differential Equations 3

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.
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.

COURSE DESCRIPTIONS

CHEM-006 Introduction to Inorganic and Physical Chemistry

54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: MATH-025, MATH-029 or equivalent or one year of high school algebra

An introduction to inorganic chemistry and physical concepts relevant to chemistry, focused toward the understanding of structure and properties of matter. Topics include scientific measurements, metric units, unit conversions, atomic structure, naming chemical compounds, types of chemical reactions, chemical formulas, mole, stoichiometry, chemical bonding, gases, solutions and acid-base chemistry. May not be repeated.

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

CHEM-007 Introduction to General, Organic and Biochemistry

54 total hours lecture, 72 total hours lab
4 Units
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 Kinesiology and 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.

LMC: DA
TRANSFER: CSU Gen. Ed. Area B1, B3

CHEM-025 General College Chemistry

54 total hours lecture, 108 total hours lab
5 Units
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 premedical programs. Students will gain knowledge in the foundations of atomic and molecular structure, nomenclature, physical and chemical changes of matter, fundamentals of chemical reactivity, chemical bonding, thermochemistry and the properties of gases. Throughout the course, skills in critical thinking, problem-solving, and effective learning will be developed. May not be repeated. (C-ID CHEM 110) (C-ID CHEM 120S)

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

CHEM-026 General College Chemistry

54 total hours lecture, 108 total hours lab
5 Units
PREREQUISITE: CHEM-025 or equivalent

CHEM-026 is the second semester of a one year course and fulfills the general chemistry requirement for students in chemistry, engineering, life science, physics, pre-dental, and premedical 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), (C-ID CHEM 110)

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

CHEM-028 Organic Chemistry

54 total hours lecture, 108 total hours lab
5 Units
PREREQUISITE: CHEM-026

CHEM-028 is a study of the physical and chemical properties of organic compounds. The principles and practice of common synthetic and analytical procedures will be introduced. This is the first semester of a two-semester organic chemistry sequence. CHEM-028 explores the chemistry of alkanes, alkenes, alkynes, and alkyl halides, along with stereochemistry and modern techniques of spectroscopy. May not be repeated. (C-ID CHEM 150) (C-ID CHEM 160S)

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

54 total hours lecture, 108 total hours lab
5 Units

**PREREQUISITE:** CHEM-028

CHEM-029 is a study of the physical and chemical properties of organic compounds. The principles and practice of common synthetic and analytical procedures will be introduced especially retrosynthetic analysis. This is the second semester of a two-semester organic chemistry sequence. CHEM-029 explores the chemistry of aromatics, alcohol’s, ethers, aldehydes, ketones, carboxylic acids & derivatives, carbonyl substitution & condensation reactions, retrosynthesis 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)

**LMC:** DA

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

---

**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.

**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 Teacher Permit Coursework
Associate Teacher Permit Coursework
Specialization: Infant Toddler Care
Curriculum in Early Childhood Specialization Certificate
Specialization: Special Needs Care & Education
Specialization: Administration of Director Early Childhood Programs
Specialization: School Age Care
School-Age Development and Education
Skill Certificate
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 four 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, early childhood education, liberal Studies, family and consumer science, sociology and family studies. 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.

To earn the Associate in Science in Early Childhood Education for Transfer degree, a student must complete 60 transferable semester units that include:
1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.

2. Complete the required major requirements listed below.

3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.


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.

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.

Certificate of Achievement: Early Childhood Education

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.

For the Certificate of Achievement in Early Childhood Education complete the coursework listed below.

For degree, certificate, waiver assistance and educational planning, contact the Department Education Advisor at jtownsend@losmedanos.edu

Program Requirements, Courses and Learning Outcomes

1. Complete CSU General Education-Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.

2. Complete the required major requirements listed below.

3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.


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.

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.
Child Development Electives

THESE COURSES MAY BE TAKEN TO FULFILL SPECIALIZATION OR TO MEET PROFESSIONAL DEVELOPMENT REQUIREMENTS:

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

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) 473-7637 or email mjackson@losmedanos.edu for application assistance.

Assistant Teacher Permit Coursework

REQUIRED COURSES: UNITS
- CHDEV-001 Introduction to Early Childhood Studies 3
- CHDEV-010 Child Growth and Development 3

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 6

Program Student Learning Outcomes

1. Obtain permit qualifications at the Assistant Teacher level.

Associate Teacher Permit Coursework

REQUIRED COURSES: UNITS
- CHDEV-001 Introduction to Early Childhood Studies 3
- CHDEV-010 Child Growth and Development 3
- CHDEV-020 Child, Family, and Community 3
- CHDEV-062 Curriculum Foundation for the Young Child 3

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 12

Program Student Learning Outcomes

1. Obtain permit qualifications at the Associate Teacher level.

Specialization: Infant Toddler Care

REQUIRED COURSES: UNITS
- CHDEV-040 Infant and Toddler Care and Development 3
- CHDEV-041 Developmentally Appropriate Practices For Infants and Toddlers 3

TOTAL UNITS REQUIRED FOR 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.

Curriculum in Early Childhood Specialization Certificate

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 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: UNITS
- CHDEV-055 Introduction to Children with Special Needs 3
- CHDEV-057 Developmentally Appropriate Practices for Children with Special Needs 3

TOTAL UNITS REQUIRED FOR 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: Administration of Director Early Childhood Programs

REQUIRED COURSES: UNITS
- CHDEV-095 Administration of Early Childhood Programs 3
- CHDEV-096 Supervision and Leadership in Early Childhood Programs 3

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 6
Program Student Learning Outcomes
1. Advance in qualifications towards permit licensure as a Program Director or Site Supervisor.

Specialization: School Age Care

REQUIRED COURSES:  UNITS
CHDEV-032  Caring for and Educating School Age Children  3
CHDEV-033  Developmentally and Culturally Appropriate Practice for the School Age Child  3
TOTAL UNITS REQUIRED FOR 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 school-age childcare and education.

School-Age Development and Education Skill Certificate

REQUIRED COURSES:  UNITS
CHDEV-010  Child Growth and Development  3
CHDEV-020  Child, Family and Community  3
CHDEV-022  Relationship-Based Discipline Strategies for Children  2
CHDEV-032  Caring for and Educating School Age Children  3
CHDEV-033  Developmentally Appropriate Practice for the School Age Child  3
CHDEV-050  Teaching in a Diverse Society  3
TOTAL UNITS REQUIRED FOR 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:  UNITS
CHDEV-010  Child Growth and Development  3
CHDEV-020  Child, Family and Community  3
CHDEV-032  Caring for and Educating School Age Children  3
CHDEV-033  Developmentally Appropriate Practice for the School Age Child  3
TOTAL UNITS REQUIRED FOR 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
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
An examination of the underlying theoretical principles of developmentally appropriate practices applied to early childhood care and education programs and environments, emphasizing the key role of relationships, play, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. May not be repeated. (C-ID ECE 120)
LMC: DA
TRANSFER: CSU

CHDEV-010  Child Growth and Development
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors while studying developmental theories and research methodologies. Students will observe children, evaluate individual differences and analyze characteristics of development at various stages. May not be repeated. (C-ID CDEV 100)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Area D, E; IGETC Area 4G
**CHDEV-011 Observation and Assessment**

54 total hours lecture  
3 Units  
PREREQUISITE: CHDEV-010  
ADVISORY: Eligibility for ENGL-100  

This course focuses on the role of observation to support children's growth and development in early childhood programs. Various observation methods are used to complete assessments (including an individual child's DRDP-R and a classroom assessment), create individual children’s learning plans, develop a classroom improvement plan and provide written family feedback. Appropriate use of assessments and rating systems, the value of portfolios and children’s authentic work samples, successful observation strategies, observing learning through play, working in partnership with families, supporting children with special needs, supporting a child’s culture and home language, and confidentiality are values that underpin all discussions and class assignments. May not be repeated. (C-ID ECE 200)

LMC: DA  
TRANSFER: CSU

**CHDEV-020 Child, Family and Community**

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100  

This course examines the development of a psycho-social understanding of the child as a member of the family and as part of the community, patterns of family living in contemporary society, roles and interrelationships; diversity in both the family, community and the issues that go along with it. Required for CHDEV majors. Satisfies Dept. of Social Services Category II. May not be repeated. (C-ID CDEV 110)

LMC: ADR: Social and Behavioral Sciences; DA  
TRANSFER: UC; CSU Gen. Ed. Area D

**CHDEV-022 Relationship-Based Discipline Strategies for Children**

36 total hours lecture  
2 Units  
ADVISORY: Eligibility for ENGL-090  

The course is designed for students who work with or interact with children in a classroom or family setting. Students will learn how to differentiate between compliance and relationship-based discipline methods, implement relationship-based discipline strategies, and identify children’s needs based on Maslow’s Hierarchy of Needs. Other topics covered include brain development, rewards and praise, and conflict resolution. May not be repeated.

LMC: DA  
TRANSFER: CSU

**CHDEV-025 Creative Art for Young Children**

36 total hours lecture  
2 Units  
ADVISORY: Eligibility for ENGL-100  

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.

LMC: DA  
TRANSFER: CSU

**CHDEV-026 Child, Family and Community**

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100  

This course examines the development of a psycho-social understanding of the child as a member of the family and as part of the community, patterns of family living in contemporary society, roles and interrelationships; diversity in both the family, community and the issues that go along with it. Required for CHDEV majors. Satisfies Dept. of Social Services Category II. May not be repeated. (C-ID CDEV 110)

LMC: ADR: Social and Behavioral Sciences; DA  
TRANSFER: UC; CSU Gen. Ed. Area D

**CHDEV-027 Relationship-Based Discipline Strategies for Children**

36 total hours lecture  
2 Units  
ADVISORY: Eligibility for ENGL-090  

The course is designed for students who work with or interact with children in a classroom or family setting. Students will learn how to differentiate between compliance and relationship-based discipline methods, implement relationship-based discipline strategies, and identify children’s needs based on Maslow’s Hierarchy of Needs. Other topics covered include brain development, rewards and praise, and conflict resolution. May not be repeated.

LMC: DA  
TRANSFER: CSU

**CHDEV-028 Creative Art for Young Children**

36 total hours lecture  
2 Units  
ADVISORY: Eligibility for ENGL-100  

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.

LMC: DA  
TRANSFER: CSU

**CHDEV-032 Caring for and Educating School Age Children**

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100  

This course covers the social, emotional, physical and cognitive development of the school-age child ages five through twelve. A focus on culturally relevant differentiated curriculum and environmental design to meet the needs of all children, including those with special needs will be incorporated. Students will develop strategies to guide and support children’s behavior based on individual needs. Careers working with school-age children will also be explored. This course meets the requirement of a School-age course for the Child Development Permit Matrix with a School-Age Emphasis. May not be repeated.

LMC: DA  
TRANSFER: CSU

**CHDEV-033 Developmentally and Culturally Appropriate Practice for the School Age Child**

54 total hours lecture  
3 Units  
ADVISORY: Concurrent enrollment in CHDEV-180  

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.

LMC: DA  
TRANSFER: CSU
CHDEV-035  Teaching Science and Math to Young Children through Hands-On Exploration

54 total hours lecture
3 Units

ADVISORY: CHDEV-001, CHDEV-062

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.

LMC: DA
TRANSFER: CSU

CHDEV-040  Infant and Toddler Care and Development

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-090

This is one of two courses to meet the Infant Toddler Specialization for the Child Development Permit. This course covers growth and developmental milestones of infants and toddlers. Components of providing quality group care for the very young, including developmentally appropriate practices, the design of effective environments, staff characteristics, and activities which encourage development are included. Satisfies Department of Social Services category IV. May not be repeated.

LMC: DA
TRANSFER: CSU

CHDEV-041  Developmentally Appropriate Practices for Infants and Toddlers

54 total hours lecture
3 Units

ADVISORY: CHDEV-040; eligibility for ENGL-090

This is one of two courses to meet the Infant Toddler Specialization for the Child Development Permit. This course covers quality infant and toddler care components including daily 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.

LMC: DA
TRANSFER: CSU

CHDEV-050  Teaching in a Diverse Society

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various inclusive classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias and multicultural approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media and schooling. May not be repeated. (C-ID ECE 230)

LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: CSU Gen. Ed. Area D

CHDEV-055  Introduction to Children with Special Needs

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-090

This is one of two courses to meet the Children with Special Needs Specialization for the Child Development Permit. The course focuses on learning about young children with developmental disabilities and those who are at risk. It will include discussions of the following: special education laws, special education terminology, typical and atypical patterns of development, specialized services and contemporary issues and challenges. Several class sessions will be devoted to the understanding of developmental delays and specific disabilities, such as, autism, sensory impairments, and the effects of pre-natal substance exposure. May not be repeated.

LMC: DA
TRANSFER: CSU

CHDEV-057  Developmentally Appropriate Practices for Children with Special Needs

54 total hours lecture
3 Units

ADVISORY: CHDEV-055; eligibility for ENGL-090

This is one of two courses to meet the Children with Special Needs Specialization for the Child Development Permit. The course focuses on learning to work with children with disabilities in inclusive, early childhood and special education settings. It will include discussions of the following: assessments and curriculum; teaching methods, techniques and instructional strategies; adapting materials and activities for children with disabilities; managing challenging behaviors; adapting the physical environment; and working with parents, therapists and specialists. May not be repeated.

LMC: DA
TRANSFER: CSU
CHDEV-062  Curriculum Foundations for the Young Child

54 total hours lecture
3 Units

ADVISORY: CHDEV-001 or CHDEV-010; eligibility for ENGL-100

This course examines the role of curriculum in early childhood settings. Students will learn about different curriculum models and how to plan, implement and document curriculum that is developmentally appropriate. Students will plan and implement learning experiences in the areas of art, math, science and language arts and social studies. Key components include principles of curriculum development, environment design, play, family involvement, observation and documentation. May not be repeated. (C-ID ECE 130)

LMC: DA
TRANSFER: CSU

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

54 total hours lecture
3 Units

PREREQUISITE: CHDEV-001

ADVISORY: Eligibility for ENGL-090

This course provides an introduction to the laws, standards, policies, procedures, and curriculum related to child health safety and nutrition in educational settings. The key components that ensure physical health, mental health, and safety for both children and staff are identified, along with the importance of collaboration with families and health professionals. There is a focus on integrating the concepts into everyday planning and practices in programs for young children. May not be repeated.

LMC: DA
TRANSFER: CSU

CHDEV-076  Introduction to Foster Parenting

27 total hours lecture
1.5 Units

ADVISORY: Eligibility for ENGL-090

This course is designed for those who are interested in becoming foster/adoptive parents or working with foster youth from birth through eighteen years. This class covers the role of Children and Family Services with foster and adoptive youth placement, the domains of child development, and the impact of abuse and neglect on attachment and bonding. Additional issues covered are working with the birth parents of the foster child, the changes of family dynamics when a child enters the family and working with foster children in early childhood programs. This course is required by Children and Family Services to become a foster or adoptive parent in Contra Costa County. May not be repeated.

LMC: DA
TRANSFER: CSU

CHDEV-077  Working with Drug-Exposed Children Birth to 5 Years Old

36 total hours lecture
2 Units

ADVISORY: Eligibility 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.

LMC: DA
TRANSFER: CSU

CHDEV-083  Field Experience in an Early Childhood Program

54-162 total hours lab
1-3 Units

ADVISORY: CHDEV-001 and 010 strongly recommended; eligibility for ENGL-090

This course is designed for students needing to complete experience requirements for the State of California Child Development Permit and California Community Care Licensing. Students will receive guidance and supervision from qualified mentor teachers in licensed early childhood programs as they gain direct hands-on experience guiding and teaching children from infancy to twelve 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 AS-T. degree in Early Childhood Education. May be repeated three times.

LMC: DA
TRANSFER: CSU
### CHDEV-090  
**Student Teaching Practicum in Early Childhood Education**

36 total hours lecture, 108 total hours by arrangement  
4 Units  
**PREREQUISITE:** CHDEV-001, 010, 011, 020, 062, and 083  
**ADVISORY:** Eligibility for ENGL-100  

Students will engage in a demonstration of developmentally appropriate early childhood teaching competencies under guided supervision. Students will utilize practical classroom experiences with young children to make connections between theory and practice, to develop professional behaviors, and to build 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)  

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

### CHDEV-092  
**Adult Supervision / Mentor Teacher Training**

36 total hours lecture  
2 Units  
**PREREQUISITE:** CHDEV-010  
**ADVISORY:** Eligibility for ENGL-100  

This course meets the two-unit requirement for adult supervision under the California Child Development Permit Matrix for the Master Teacher or Site Supervisor or Program Director. It is also required for teachers who want to become community-based mentors for LMC students in field placement coursework. Students will learn principles of and effective strategies to mentor and coach teachers and aides in the early childhood workforce. May not be repeated.  

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

### CHDEV-095  
**Administration of Early Childhood Programs**

54 total hours lecture  
3 Units  
**PREREQUISITE:** CHDEV-001  
**ADVISORY:** Eligibility for ENGL-100  

This course covers the basic principles and practices of administering an early childhood program. Major topics include types of programs, nutrition and menu planning, budgeting, staffing, Federal and State regulations and requirements and creating safe learning environments. This course is required for the Children’s Center Supervision Permit from the State of California and satisfies the Department of Social Services Category UI requirement. May not be repeated.  

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

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

54 total hours lecture  
3 Units  
**PREREQUISITE:** CHDEV-010  
**ADVISORY:** Eligibility for ENGL-100  

This course is one of a two part series covering the administration and supervision components of directing an early childhood program. This course covers effective practices to supervise, manage and lead 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.  

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

### CHDEV-098  
**Independent Study in Child Development**

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.
CHDEV-170  Occupational Work Experience Education in Child Development

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

CHDEV-180  Internship in Child Development

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

CHDEV-990s  Selected Topics in Child Development

DA varies with course content.

Chinese

COURSE DESCRIPTIONS

CHIN-030  Elementary Chinese I

90 total hours lecture
5 Units
ADVISORY: Eligibility for ENGL-090

This course is the first semester of Mandarin Chinese. It covers a visual/oral/aural approach to understanding, speaking, reading and writing Chinese with a focus on pronunciation of the four tones. The content which includes greetings, counting, telling time, names for family members is infused with the rich Chinese culture. This course is equivalent to two years of high school Chinese. May not be repeated.

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

CHIN-040  Elementary Chinese II

90 total hours lecture
5 Units
PREREQUISITE: CHIN-030 (or two years high school Chinese)
ADVISORY: Eligibility for ENGL-090

This course is the second semester of Mandarin Chinese. It covers a visual/oral/aural approach to understanding, speaking, reading and writing Chinese with a focus on the Pinyin System of pronunciation. The content which includes expressing preferences, negations, affirmations, and sports vocabulary is infused with the rich Chinese culture. This course is equivalent to two years of high school Chinese. May not be repeated.

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.

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-990s  Selected Topics in Chinese

DA varies with course content.
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. 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.

To earn the Associate in Arts in Communication Studies for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REqUIRED CORE COURSE:  UNITS
SPCH-110  Oral Communication  3

LIST A:   UNITS
SPCH-120  Argumentation  3
SPCH-130  Interpersonal Communication  3
TOTAL UNITS  6

LIST B: SELECT TWO COURSES (6 UNITS) UNITS
SPCH-160  Debate Practicum  3
SPCH-150  Intercultural Communication  3
JOURN-100  Mass Communication  3
TOTAL UNITS  6

LIST C: SELECT ONE COURSE. ANY LIST A OR LIST B COURSES NOT USED ABOVE (3 UNITS) UNITS
ENGL-220  Critical Inquiry and Analysis  3
ENGL-221  Advanced Composition and Critical Thinking  3
JOURN-110  Writing for the Media  3
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 institution.
2. Demonstrate the knowledge of concepts, and intellectual skills of an effective communicator.
3. Demonstrate how to communicate effectively with an audience in a face to face oral communication setting.

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.

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

SPCH-110  Speech Communication
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100
This course in oral communication covers the fundamentals of public speaking with an emphasis on: selection and research of subjects; organization and support of ideas; and development and delivery of various forms of speeches. Did you know that employers routinely rate good communication skills at the top of their list of desirable qualities in employees? Gain the confidence and polish you need to excel in your studies and in the workplace. May not be repeated. (C-ID COMM 110)

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area A1; IGETC Area 1C
**SPCH-120  Argumentation and Debate**
54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL 100

This course studies the principles of argumentation theory through lecture and in class debate performances. Issues covered include the analysis of propositions, current events, evidence, advocacy, formal traditions in public policy, and critical reasoning skills. Students will perform in class debates centered around philosophical, ethical, and/or current event issues. May not be repeated. (C-ID COMM 120)

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

**SPCH-130  Interpersonal Communication**
54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100

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)

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

**SPCH-150  Intercultural Communication**
54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL 100

This course explores the principles of intercultural communication through lecture, group, and writing assignments. Some of the issues covered include: the elements of a culture, intercultural competence as a learned skill, tolerance, norms, co-cultures, the role of language in communication, historical conflicts, and global social inequities. Content and lectures will come from a multicultural perspective and require original research and readings on cultural traditions and norms. May not be repeated. (C-ID COMM 150)

LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC, CSU Gen. Ed. Area D; IGETC Area 4C

**SPCH-160  Forensics**
54 total hours lecture  
3 Unit  
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)

LMC: DA
TRANSFER: UC, CSU

**SPCH-180  Introduction to Communication Studies**
54 total hours lecture  
3 Units  
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.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4D, 4G

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

DEGREE—Associate in Arts Degree for Transfer
Computer Science

DEGREE—Associate of Science
Computer Support Specialist
Networking and Security

CERTIFICATE OF ACHIEVEMENT—Computer Science
Computer Support Specialist (Basic)
Computer Support Specialist (Advanced)
Computer Applications Specialist
Networking and Security (Basic)
Networking and Security (Advanced)

COLLEGE SKILLS CERTIFICATES—Computer Science
Foundation
Core Competencies
Game Design
Certified PC Repair Technician
Web Design

ASSOCIATE IN SCIENCE
COMPUTER SCIENCE FOR TRANSFER DEGREE

The Associate in Science in Computer Science for Transfer Degree is designed for students desiring advanced degrees in Computer Science. The Los Medanos College Computer Science courses meet the lower division transfer requirements for Computer Science. The curriculum includes the first and second year requirements to prepare students to transfer and study at a California State University. A baccalaureate degree is the recommended preparation for those considering professional careers in Computer Science.

To earn the Associate in Science in Computer Science for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE- Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

Program Student Learning Outcomes

1. Be academically prepared to transfer to a computer science program at a four-year university.
2. Demonstrate the ability to solve a variety of problems using computational skills necessary for careers in computer science and other related fields.

Sample:

REQUIRED COURSES - FIRST SEMESTER:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-122</td>
<td>Programming Concepts &amp; Methodologies I</td>
<td>3</td>
</tr>
<tr>
<td>MATH-050</td>
<td>Calculus and Analytic Geometry I</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 7

REQUIRED COURSES - SECOND SEMESTER:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-132</td>
<td>Programming Concepts &amp; Methodologies II</td>
<td>3</td>
</tr>
<tr>
<td>MATH-060</td>
<td>Calculus and Analytic Geometry II</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 7

REQUIRED COURSES - THIRD SEMESTER:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-142</td>
<td>Computer Architecture and Organization</td>
<td>3</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>
</tbody>
</table>

TOTAL UNITS 11

REQUIRED COURSES - FOURTH SEMESTER:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-160</td>
<td>Discrete Math</td>
<td>4</td>
</tr>
<tr>
<td>PHYS-041</td>
<td>Physics for Scientists and Engineers II</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS 8

TOTAL UNITS FOR THE MAJOR: 29

TOTAL ADDITIONAL REQUIREMENT: 4*

TOTAL CSU-GE/IGETC REQUIREMENTS: 37-39

TOTAL UNITS FOR THE DEGREE: 60*

*MATH-070 is a prerequisite/co-requisite for PHYS-041, therefore it does not count towards the 60 unit total.

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.

ASSOCIATE OF SCIENCE DEGREE
COMPUTER SUPPORT SPECIALIST

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-010</td>
<td>Introduction to Computer Networking</td>
<td>2</td>
</tr>
<tr>
<td>COMSC-012</td>
<td>Introduction to Network Security</td>
<td>2</td>
</tr>
<tr>
<td>COMSC-037</td>
<td>Help Desk-Customer Technical Support</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-040</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>COMSC-060</td>
<td>Information Technologies</td>
<td>4</td>
</tr>
<tr>
<td>COMSC-061</td>
<td>Advanced Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-080</td>
<td>Survey of Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-090</td>
<td>PC Repair - Hardware (A+ Certification)</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-091</td>
<td>PC Repair - Software (A+ Certification)</td>
<td>3</td>
</tr>
</tbody>
</table>
COMSC-122 Programming Concepts and Methodologies I 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.

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
NETWORKING AND SECURITY

REQUIRED COURSES: UNITS
COMSC-010 Introduction to Computer Networking 2
COMSC-011 Introduction to Network 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 A 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 Visual Basic.NET (VB.NET) 3
COMSC-044 Introduction to C++ Programming 3
COMSC-051 Java for Programmers 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 (A+ Certification) 3
COMSC-091 PC Repair - Software (A+ Certification) 3
COMSC-092 PC Repair - A+ Prep (A+ Certification) 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-060 Information Technologies 4
COMSC-061 Advanced Microcomputer Applications 3
COMSC-080 A Survey of Operating Systems 3
COMSC-090 PC Repair - Hardware (A+ Certification) 3
COMSC-091 PC Repair - Software (A+ Certification) 3
COMSC-122 Programming Concepts and Methodologies I 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
#### COMPUTER APPLICATIONS SPECIALIST

<table>
<thead>
<tr>
<th>Level One</th>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-040</td>
<td>Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>COMSC-060</td>
<td>Information Technologies</td>
<td>4</td>
</tr>
<tr>
<td>COMSC-061</td>
<td>Advanced Microcomputer Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS REQUIRED IN LEVEL ONE COURSES</strong></td>
<td></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level Two (requires completion of Level One)</th>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-030</td>
<td>Web Site Development - Part I</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-056</td>
<td>Programming Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-080</td>
<td>A Survey of Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

AND SELECT ONE OF THE FOLLOWING PROGRAMMING COURSES FROM:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-041</td>
<td>Programming with Visual Basic.NET (VB.NET)</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-044</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-051</td>
<td>Java for Programmers</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-010</td>
<td>Introduction to Computer Networking</td>
<td>2</td>
</tr>
<tr>
<td>COMSC-011</td>
<td>Introduction to Network Operating Systems</td>
<td>2</td>
</tr>
<tr>
<td>COMSC-012</td>
<td>Introduction to Network Security</td>
<td>2</td>
</tr>
<tr>
<td>COMSC-037</td>
<td>Help Desk Customer Technical Support</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-040</td>
<td>A Survey of Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-120</td>
<td>Introduction to Computer Forensics</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-121</td>
<td>Computer Forensics Investigations and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-123</td>
<td>Introduction to Computer Ethics</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-010</td>
<td>Introduction to Computer Networking</td>
</tr>
<tr>
<td>COMSC-011</td>
<td>Introduction to Network Operating Systems</td>
</tr>
<tr>
<td>COMSC-012</td>
<td>Introduction to Network Security</td>
</tr>
<tr>
<td>COMSC-037</td>
<td>Help Desk Customer Technical Support</td>
</tr>
<tr>
<td>COMSC-040</td>
<td>A Survey of Operating Systems</td>
</tr>
<tr>
<td>COMSC-120</td>
<td>Introduction to Computer Forensics</td>
</tr>
<tr>
<td><strong>TOTAL UNITS FOR THIS CERTIFICATE</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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>Introduction to Computer Networking</td>
</tr>
<tr>
<td>COMSC-011</td>
<td>Introduction to Network Operating Systems</td>
</tr>
<tr>
<td>COMSC-012</td>
<td>Introduction to Network Security</td>
</tr>
<tr>
<td>COMSC-037</td>
<td>Help Desk Customer Technical Support</td>
</tr>
<tr>
<td>COMSC-040</td>
<td>A Survey of Operating Systems</td>
</tr>
<tr>
<td>COMSC-080</td>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>COMSC-120</td>
<td>Introduction to Computer Forensics</td>
</tr>
<tr>
<td>COMSC-121</td>
<td>Computer Forensics Investigations and Analysis</td>
</tr>
<tr>
<td>COMSC-123</td>
<td>Introduction to Computer Ethics</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
</tr>
</tbody>
</table>

**ELECTIVES - SELECT TWO ELECTIVES FROM THE LIST OF PROGRAMMING APPLICATIONS:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-041</td>
<td>Programming with Visual Basic.NET (VB.NET)</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-044</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-051</td>
<td>Java for Programmers</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-056</td>
<td>Programming Logic and Design</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-124</td>
<td>Program Design &amp; Data Structures</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL UNITS FOR THIS CERTIFICATE</strong></td>
<td></td>
<td><strong>31-32</strong></td>
</tr>
</tbody>
</table>

**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

REQUIRED COURSES: 
COMSC-040 Introduction to Computers 4
COMSC-060 Information Technologies 4
COMSC-061 Advanced Microcomputer Applications 3

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

REQUIRED COURSES: 
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

AND SELECT ONE OF THE FOLLOWING PROGRAMMING COURSES FROM:
COMSC-041 Programming with Visual Basic.NET (VB.NET) 3
COMSC-044 Introduction to C++ Programming 3

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 9

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

REQUIRED COURSES: 
COMSC-110 Gaming: An Introduction 3
COMSC-111 Gaming: Beginning Illustration and Storyboarding 3
COMSC-112 Gaming: Beginning Game Design 3
ART-020 Introduction to Drawing 3
ART-054 Adobe Photoshop 3

TOTAL UNITS REQUIRED FOR 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)

REQUIRED COURSES: 
COMSC-090 PC Repair – Hardware (A+ Certification) 3
COMSC-091 PC Repair – Software (A+ Certification) 3
COMSC-092 PC Repair - A+ Prep (A+ Certification) 1.5

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 7.5

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 Microsoft, LINUX and MAC O/S operating systems.
3. Prepare for and take the COMP TIA A+ Certification Exam.

Web Design

REQUIRED COURSES: 
COMSC-030 Web Site Development – Part I 1.5
COMSC-031 Web Site Development – Part II 1.5
COMSC-032 Web Site Development – Dreamweaver/Flash 3
COMSC-040 Introduction to Computers 4

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 10

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
27 total hours lecture, 36 total hours lab
2 Units
ADVISORY: Eligibility for ENGL-100

Introduction to Computer Networking is intended for students considering careers in the networking field and individuals looking to understand and apply networking concepts in business or home environment. By solving “real world” problems, students will develop an understanding of networking standards and protocols while being guided step-by-step through software and hardware configurations. No previous networking experience is necessary; however students should have knowledge of basic computer practices. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-011  Introduction to Network Operating Systems
27 total hours lecture, 36 total hours lab
2 Units
ADVISORY: COMSC-010 or equivalent; eligibility for ENGL-090

This course is an introduction to network operating systems, including Microsoft Windows Server, Unix, and Linux. Designed for students interested in learning more about computer networking or pursuing a career in Information Technology, this course focuses on fundamental skills that can be applied to any network-based computing environment, including business and educational networks. Students in this course will work with several different network operating systems to complete real-world tasks, such as managing user accounts, working with network file systems, and basic security configurations. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-012  Introduction to Network Security
27 total hours lecture, 36 total hours lab
2 Units
ADVISORY: Eligibility for ENGL-100

This course is an introduction to the security issues of today’s computer networks, specifically the Internet. Concepts covered in the course (including TCP/IP, encryption, worms, viruses, hacking, and denial of service attacks) can be applied to home networking as well as large-scale enterprise networking. Student learning includes real-world activities. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-030  Web Site Development-Part I
27 total hours lecture
1.5 Units
ADVISORY: Eligibility for ENGL-090

This course will teach students how to program web pages for the Internet using HTML and XHTML, and other web software programs. Understanding the structure of HTML and XHTML is essential to edit and troubleshoot web sites. The course also includes web site design and layout, how Internet web sites perform, and how to create a web site for a business, eBay, educational, a nonprofit organization, or personal use. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-031  Web Site Development - Part II
27 total hours lecture
1.5 Units
ADVISORY: COMSC-030 or have experience with the Internet or experience with web-development

This course is an introduction to different web designing software programs used to design a web site. It covers the layout and organizing of content, photos, video, sounds and graphics on a web page, selecting a domain name, finding a web host, and how to upload web pages to the Internet. Students will design a web site for their business, educational, non-profit, or personal use. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-032  Web Site Development- Dreamweaver/Flash
54 total hours lecture
3 Units
ADVISORY: COMSC-030 and 031 or experience with web development; eligibility for ENGL-090

This course teaches students how to design a professional-looking website integrating two web designing software computer programs-Dreamweaver and Flash- which are ideal web tools for web site development. This software is used to create Web Sites with the most advanced designs possible on the Web. Flash is the professional standard for producing high-impact Web experiences. Students will use both programs to make their own web site and upload the web site to the Internet. May not be repeated.
LMC: DA
TRANSFER: CSU
COMSC-037  Help Desk Customer Technical Support
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
A basic course in the skills and tools required for entry level I/T support specialist positions. This includes how to analyze computer related problems and formulate action plans; best practices in communicating with end users; and using diagnostics tools and I/T support tracking software. In addition, students will learn soft skills to improve employability in the I/T sector. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-040  Introduction to Computers
54 total hours lecture, 36 total hours lab
4 Units
ADVISORY: Eligibility for ENGL-090
This introductory course in computer information systems with a foundation for computer science that includes basic concepts, terminology, and the operation of computers and related technologies. Also included is practical experience with common computer applications and the fundamentals of computer programming using Qbasic. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

COMSC-041  Programming with Visual Basic.Net (VB.NET)
54 total hours lecture
3 Units
ADVISORY: COMSC-040 or COMSC-060
This is an introductory programming course using Microsoft Visual Basic.Net (VB.NET). It introduces students to the development of graphically oriented, event driven programs. Students will learn fundamental programming structures, as well as the use of the language of develop web based applications. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

COMSC-044  Introduction to C++ Programming
54 total hours lecture
3 Units
ADVISORY: COMSC-040 or 041; eligibility for ENGL-090
This course is designed to be an introduction to the C programming language. We use a C++ text because C++ is a subset of C and is an object-oriented language. C++ has evolved into one of the leading programming languages in the computer software industry. C++ compilers are available on all platforms ranging from microcomputers to mainframes. The course will include structured program design, programming style, documentation, modular design, code reusability, program verification and testing, data abstraction, information hiding, and data structuring. Problems will come from the areas of business. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

COMSC-049  Computer Literacy
27 total hours lecture, 9 total hours lab
1.5 Units
ADVISORY: Eligibility for ENGL-090
An introductory course in computer information systems surveying basic concepts, terminology, and the operation of computers and related technologies. Also included is practical experience with common computer applications. May not be repeated.
LMC: DA

COMSC-051  Java for Programmers
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: COMSC-040 or equivalent; eligibility for ENGL-090
This course is an introduction to Java programming which is used by companies of all sizes as the main programming language to develop various applications and projects worldwide. Students will be introduced to the basic skills needed to write, compile, and run simple Java applications. Topics covered are project designing, object-oriented programming, console applications, graphics applications and many other elements of the Java language. May not be repeated.
LMC: DA
TRANSFER: UC, CSU
COMSC-060  Information Technologies
54 total hours lecture, 54 total hours lab
4 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
This course presents technology tools and applications essential to
fully participate in the contemporary electronic workplace. Students
will be introduced to fundamental concepts and basic applications
of word processing, electronic worksheets, database management,
presentation software, and communications software. The course will
also include working with other common technologies such as wireless,
virtualization and cloud computing. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-061  Advanced Microcomputer Applications
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: COMSC-060; eligibility for ENGL-090
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.
LMC: DA
TRANSFER: CSU

COMSC-080  A Survey of Operating Systems
54 total hours lecture, 18 total hours lab
3 Units
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 con-
trol a contemporary microcomputer and handheld devices. In addition,
students will develop skills in hardware configuration, startup custom-
ization, 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.
LMC: DA
TRANSFER: CSU

COMSC-090  PC Repair - Hardware (A+ Certification)
36 total hours lecture, 36 total hours lab
3 Units
ADVISORY: COMSC-040, or working knowledge of PC Systems and
Operating Systems; eligibility for ENGL-090
The first of three courses (COMSC-090, 091, and 092) designed to
prepare students for the Comp TIA A+ Certification exam. Mastering
the craft of the PC technician requires students to learn many details
about a number of operating systems, drivers, and configurations. With
A+ approved courseware, students will learn how to troubleshoot, up-
grade, install, and perform preventive maintenance on personal com-
puters (PC) operating systems in both Corporate and Home environ-
ments. 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.
LMC: DA
TRANSFER: CSU

COMSC-091  PC Repair - Software (A+ Certification)
36 total hours lecture, 36 total hours lab
3 Units
ADVISORY: COMSC-090, or working knowledge of PC systems and
operating systems; eligibility for ENGL-090
The second of three courses (COMSC-090, 091, and 092) designed to
prepare students for the Comp TIA A+ Certification exams. Master-
ing the craft of the PC Technician requires the students to learn about
a number of operating systems, drivers, and configurations. With
A+ approved courseware, students will learn how to troubleshoot,
upgrade, install, backup, restore and perform preventive maintenance
on Personal Computers (PC) operating systems in both corporate
and home environments. The course includes the theory, history, best
practice routines and hands on experience required of A+ certified
technicians or to manage home/office systems more efficiently. May
not be repeated.
LMC: DA
TRANSFER: CSU
COMSC-092  PC Repair - A + Prep (A+ Certification)
18 total hours lecture, 18 total hours lab
1.5 Units
ADVISORY: COMSC-090, 091, or working knowledge of PC systems and operating systems; eligibility for ENGL-090
The third of three courses (COMSC-090, 091, and 092) designed to prepare students for the Comp TIA A+ Certification Exams. Mastering the craft of the PC technician requires students to learn many details about a number of operating systems, drivers, and configurations. With A+ approved courseware, students will learn how to troubleshoot, upgrade, install, backup, restore and perform preventive maintenance on personal computers (PC) operating systems in both corporate and home environments. The course includes the theory, history, best practice routines and hands on experience required of A+ certified technicians or to manage home/office systems more efficiently. May not be repeated.
LMC: DA

COMSC-098  Independent Study in Computer Science
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

COMSC-110  Gaming: An Introduction
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
An introduction to electronic game development with an emphasis on computer animation and programming. Computer animation will introduce the student to an overview of character modeling, rendering, animation illustrations, story boarding, 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.
LMC: DA
TRANSFER: UC, CSU

COMSC-111  Gaming: Beginning Illustration and Storyboarding
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
An introduction to the array of graphics required for the conceptual stage of game development. Students will learn that creating graphics for a game is like creating a virtual world. Topics include basic game design, game charts, thumbnail sketches, story boards, level layouts, environmental illustrations, character designs, and the designing of graphical user interfaces. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-112  Gaming: Beginning Game Design
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
Beginning Game Design opens the door to a fascinating world of creative possibilities for students interested in breaking into the gaming industry. Students will investigate how illustrations are developed and used in games, then create their own game objects while gaining a better understanding of 3D game development. Topics include basic techniques and methods for creating simple game objects. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-120  Introduction to Computer Forensics
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
This is a foundation course in the theory, skills, and tools of computer forensics. Students will learn techniques on preventing intrusions into network systems, quickly assessing any damage that may occur, initiating and managing various types of investigations, and preparing a comprehensive response plan. May not be repeated.
LMC: DA
TRANSFER: CSU
COMSC-121  Computer Forensics Investigations and Analysis
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: COMSC-120; COMSC-040; eligibility for ENGL-090
This course will emphasize in-depth analysis of forensics tools, methods, and procedures used for conducting an investigation of computers and mobile devices. Learning techniques of acquiring digital evidence, acquisition collection, securing and recording evidence is critical to prevent data contamination. File systems analysis includes file signature and hash analysis ensuring specialized diagnostic software to retrieve data. This course prepares students for the industry standard certification EnCase (EnCE) Certified Examiner which is required for many computer forensic positions. May not be repeated.
LMC: DA
TRANSFER: CSU

COMSC-122  Programming Concepts & Methodologies I
54 total hours lecture
3 Units
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)
LMC: DA
TRANSFER: UC, CSU

COMSC-123  Introduction to Computer Ethics
54 total hours lecture
3 Units
ADVISORY: COMSC-040; eligibility for ENGL-090
This course 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.
LMC: DA
TRANSFER: CSU

COMSC-126  Introduction to Database Management Systems
54 total hours lecture
3 Units
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 data base 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.
LMC: DA
TRANSFER: UC, CSU

COMSC-132  Programming Concepts & Methodologies II
54 total hours lecture
3 Units
PREREQUISITE: COMSC-122 or equivalent
ADVISORY: Eligibility for ENGL-090
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, stacks, queues, trees, hash tables, heaps, graphs and sorting and searching techniques. Extensive programming of a variety of data structures is required. May not be repeated. (C-ID COMP 132)
LMC: DA
TRANSFER: UC, CSU

COMSC-142  Computer Architecture and Organization
54 total hours lecture
3 Units
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. (C-ID COMP-142)
LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSC-170</td>
<td>Occupational Work Experience in Computer Science</td>
<td>60-300</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: Approved online application</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMSC-180</td>
<td>Internship in Computer Science</td>
<td>60-300</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: Approved online application and employer placement</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMSC-900s</td>
<td>Selected Topics in Computer Science</td>
<td>DA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DA varies with course content.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP-160</td>
<td>General Work Experience Education</td>
<td>60-300</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: Approved Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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 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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOP-170</td>
<td>Occupational Work Experience Education</td>
<td>60-300</td>
<td>1-4</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: Approved application</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></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 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 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Counseling

**COUNS-030  Orientation to College**
18 total hours lecture
1 Unit
ADVISORY: Completion of the LMC Assessment Test for English and Math or equivalent

This course is designed for first-time students to understand navigating the higher educational system and orientation to Los Medanos College. We will cover academic policies, resources, academic programs and services; introduction LMC’s majors, degrees and transfer opportunities. The class will focus on academic goal completion, California system of higher education; standards of scholarship, formation of a comprehensive educational plan. The course covers topics including: use of student services, LMC certificates, associate degrees, and requirements for transfer. May not be repeated.

LMC: DA
TRANSFER: CSU

**COUNS-032  Career Development**
9 total hours lecture, 18 total hours lab
1 Unit

This course is an intense career exploration designed to engage students in their own career development. Topics include how to realistically assess, review, and interpret various areas such as interests, attitudes, values, priorities, skills and strengths, goals, and career options in the current job market. May not be repeated.

LMC: DA
TRANSFER: CSU

**COUNS-033  Transfer Planning**
18 total hours lecture
1 Unit
ADVISORY: Eligibility for ENGL-090

This course enables students to become active participants in planning their continuing education by providing students with information necessary to evaluate universities, plan required coursework, explore housing, financial aid, and to familiarize themselves with programs and services offered at universities. May not be repeated.

LMC: DA
TRANSFER: CSU
COUNS-034  College Success
18 total hours lecture
1 Unit
This course is designed to help students learn and to develop the critical thinking skills and personal confidence necessary to succeed in their college experiences. Topics will include problem solving techniques, learning styles, time management, goal-setting, study skills and test-taking strategies, and stress management. May not be repeated.
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.
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 in Arts Degree for Transfer
Theatre Arts

DEGREE--Associate of Arts
Acting

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 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.

To earn the Associate in Arts in Theatre Arts for Transfer degree, a student must complete 60 transferable semester units that include:
1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAMA-016</td>
<td>Theatre Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-020</td>
<td>Principles of Acting I</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-050</td>
<td>Theatrical Production I: Acting for Performance</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

SELECT THREE COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAMA-021</td>
<td>Principles of Acting II</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-040</td>
<td>Theatrical Stagecraft</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-041</td>
<td>Theatrical Design</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-051</td>
<td>Theatrical Production II: Intermediate Acting for Performance</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>DRAMA-052 Directing and Collaborative Performance</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS FOR THE MAJOR:</td>
<td></td>
<td><strong>18</strong></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 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.

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>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAMA-015 Multicultural Perspectives in Theatre</td>
<td>Provides an interdisciplinary course focused on experience, imagination, and expression in dramatic arts, 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. (C-ID THTR 111)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-016 Theatre Appreciation</td>
<td>Introduces students to 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 &quot;nuts and bolts&quot; 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)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-020 Principles of Acting 1</td>
<td>Provides 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)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-021 Principles of Acting 2</td>
<td>Provides 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)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-022 Principles of Voice and Dialects</td>
<td>Provides 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)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-023 Principles of Improvisation and Movement</td>
<td>Provides 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)</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-052 Directing and Collaboration</td>
<td>Provides 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)</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR: 18

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.
DRAMA-021  Principles of Acting II
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: DRAMA-020; eligibility for ENGL-090
This course expands on Stanislavski technique by including acting techniques by Meisner, Brook, Adler, Mamet, Hagen, Lewis, and Chekhov. Students will explore and apply these acting techniques and styles to scene and monologue work. May not be repeated. (C-ID THTR 152)
LMC: DA
TRANSFER: UC, CSU

DRAMA-022  Principles of Voice and Dialects
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
This course provides principles, experiences, and foundations of voice for the stage; exploring and understanding the anatomy of the vocal mechanism; relaxation exercises used to release tension and free the voice; a detailed warm up; as well as vocal and breath development; and textual exploration exercises constructed by Kristin Linklater, Patsy Rodneburg, and Cicely Berry. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

DRAMA-023  Principles of Improvisation and Movement
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
This course provides foundations, principles, and exercises designed to aid the actor’s creative process for the stage. Actors will work with body alignment in order to create a neutral palate for the actor’s work to begin. Control over the body as a whole as well as over specific parts will be explored and work shopped through the use of pantomime, mask, stage combat, clowning, and dramatic play. Techniques explored will range from Viewpoints and undulations to stage combat, mime, and psycho-physical acting. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

DRAMA-025  The Texture of Diversity: LGBT Identity in Dramatic Art Forms
54 total hours lecture
3 Units
ADVISORY: DRAMA-015, DRAMA-070; eligibility for ENGL-100
In the Twentieth and Twenty-first Centuries, American theater and other representational media (film, television, performance art, and performative activism) have been valuable methods to construct, preserve and inquire into identity categories. Lesbian, Gay, Bisexual, and Transgender (LGBT) Theatre, TV and Film, for example, offer students the opportunity to foster a deeper understanding of and appreciation for literature and theatrical and visual texts that represent the worldviews and experiences of individuals and communities who have been marginalized throughout history on the basis of their sexualities. This course explores how dramatists and filmmakers have used performance as a tool for LGBT political activism, for the cultivation of cultural pride, and for explorations of LGBT issues too sensitive to be addressed in other contexts. LGBT Literature, Theatre, TV and Film provides students with a range of sources that offer unique insights into personal experiences, social issues, and political/legal contexts that emerge from sexual cultures, with an emphasis on the intersectionality of race, class, gender, gender identity, sexual orientation, religion, and physical and mental ability. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: CSU

DRAMA-030  Chicano/a Mexican American Cinema: A Critical Analysis
54 total hours lecture
3 Units
ADVISORY: ENGL-100
DRAMA-030 is a critical approach to the study of Chicano/a cinema. It utilizes film screenings, lectures, classroom discussions, and readings to facilitate the study of film as both an artistic form as well as an expression of Chicano/a historical, political and social movements in the United States and to explore the ethical values examined and expressed in Chicano/a movies. May not be repeated.
LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B.
DRAMA-040  Theatrical Stagecraft
18 total hours lecture, 108 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
This course is an introduction and in depth immersion into the art of scenic design and construction. Students will explore various techniques and styles used in popular scenic design, become proficient in the use of scene shop tools and construction, develop basic techniques used in scene painting, and use them to design a production model as well as build a working set for a production. May not be repeated. (C-ID THTR 171)
LMC: DA
TRANSFER: UC, CSU

DRAMA-041  Theatrical Design
18 total hours lecture, 108 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-090
This course is an introduction and in depth immersion into the art of light, costume, and make-up design. Students will explore and develop skills used by scenic, light, costume, and make-up designers and apply them to the construction and design of a working production as well as budget and design proposals. May not be repeated. (C-ID THTR 172)
LMC: DA
TRANSFER: UC, CSU

DRAMA-050  Theatrical Production I: Beginning Acting for Performance
162 total hours lab
3 Units
ADVISORY: Enrollment in either DRAMA-040 or 041; eligibility for ENGL-090
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. (C-ID THTR 191)
LMC: DA
TRANSFER: UC, CSU

DRAMA-051  Theatrical Production II: Intermediate Acting for Performance
162 total hours lab
3 Units
ADVISORY: Prior or concurrent enrollment in either DRAMA-040 or DRAMA-041; eligibility for ENGL-090
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. (C-ID THTR 191)
LMC: DA
TRANSFER: UC, CSU

DRAMA-052  Directing and Collaborative Performance
18 total hours lecture, 108 total hours lab
3 Units
ADVISORY: Prior or concurrent enrollment in DRAMA-040 or DRAMA-041; eligibility for ENGL-090
In this course students will be involved in every aspect of a full theatrical production. Students will select a script hold auditions, cast, design, construct, direct, market, and star in this collaborative production performed for a live audience. May not be repeated.
LMC: DA
TRANSFER: CSU

DRAMA-070  Film as an International Art Form
54 total hours lecture, 36 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-100
DRAMA-070 is a critical approach to the study of film that integrates both the technical elements of filmmaking with aesthetic and thematic elements through the exploration of various genres which may include but are not limited to suspense and mystery, science fiction/fantasy, survival and adventure, romance and comedies and/or Westerns. The class encompasses films from the early 20th century through the present time and may include films from the Americas, Europe, Australia and/or Asia as it explores the cultural and artistic concerns of a variety of cultures as reflected in motion pictures. Related disciplines such as editing, music scoring, screenwriting, acting for the camera are also discussed in relationship to the films being studied. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A
DRAMA-072 The Color of Media: A Journey Through African American Life in Film, Television and Theatre

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

This course explores how dramatists, television writers and filmmakers have used these three mediums as tools to explore African American cultural, political and social realities in America during the 20th and 21st centuries. The Color of Media surveys a range of texts that offer insights into personal experiences, social issues, and political/legal contexts that emerge from the African American experience and is translated into a dramatic form. Focus is on how race, class, gender, sexual orientation, philosophical and religious underpinnings and physical and mental abilities have all impacted the development of the African American community in the United States. May not be repeated.

LMC: ADR: Ethnic/Multicultural Studies; Arts and Humanities; DA
TRANSFER: CSU Gen. Ed. Area C2

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.

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

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

ECON-005 provides an examination of the origin and development of the American economy from the colonial era to the present time. Topics studied include the following: colonial policies, land and resource use, industrial and economic growth, role of immigration and ethnic/cultural groups, the transport revolution, the development of money, banking and trade patterns, as well as the role of the government. This course applies the economic context in which the American society, culture and political institutions evolved during the agricultural and extractive era, the industrial era and the current era. The completion of ECON-005 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. May not be repeated.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

ECON-010 Principles of Microeconomics

54 total hours lecture
3 Units
PREREQUISITE: MATH-029, 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.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4B

ECON-011 Principles of Macroeconomics

54 total hours lecture
3 Units
PREREQUISITE: MATH-029, 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.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; 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.

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**

54 total hours lecture
3 Units

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.

LMC: ADR: 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.

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

TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.
EDUC-170  Occupational Work Experience Education in Education
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

EDUC-180  Internship in Education
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

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: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-012</td>
<td>Pre-Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ENGL-095</td>
<td>Accelerated Reading, Writing, and Critical Thinking</td>
<td>5</td>
</tr>
</tbody>
</table>
### REQUIRED COURSES: FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ETEC-012</td>
<td>Alternating Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>MATH-025</td>
<td>Elementary Algebra</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 13

### REQUIRED COURSES: SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-020</td>
<td>Electric Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-022</td>
<td>Semiconductor Devices</td>
<td>2</td>
</tr>
<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
<td>2</td>
</tr>
<tr>
<td>PHYS-015</td>
<td>Introduction to Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 11

### REQUIRED COURSES: THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>ETEC-032</td>
<td>Instrumentation Process Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-034</td>
<td>Instrument Calibration</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 8

### REQUIRED COURSES: FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-040</td>
<td>National Electrical Code</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-042</td>
<td>Wiring Methods and Code Application</td>
<td>1</td>
</tr>
<tr>
<td>ETEC-044</td>
<td>Power Distribution &amp; Transformers</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-046</td>
<td>DC &amp; AC Motors &amp; Generators</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR**: 42

**TOTAL UNITS FOR THE DEGREE**: 60

**TOTAL UNITS FOR THIS CERTIFICATE**: 42

### 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

### RECOMMENDED COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-012</td>
<td>Pre-Algebra</td>
<td>4</td>
</tr>
<tr>
<td>ENGL-095</td>
<td>Accelerated Reading, Writing, and Critical Thinking</td>
<td>5</td>
</tr>
</tbody>
</table>

### REQUIRED COURSES: FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-010</td>
<td>Direct Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>ETEC-012</td>
<td>Alternating Current Circuits</td>
<td>4</td>
</tr>
<tr>
<td>MATH-025</td>
<td>Elementary Algebra</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 13

### REQUIRED COURSES: SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-020</td>
<td>Electric Motor Control</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-022</td>
<td>Semiconductor Devices</td>
<td>2</td>
</tr>
<tr>
<td>ETEC-024</td>
<td>Digital Devices</td>
<td>2</td>
</tr>
<tr>
<td>PHYS-015</td>
<td>Introduction to Physics</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 11

### REQUIRED COURSES: THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>4</td>
</tr>
<tr>
<td>ETEC-032</td>
<td>Instrumentation Process Measurement</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-034</td>
<td>Instrument Calibration</td>
<td>1</td>
</tr>
<tr>
<td>CHEM-006</td>
<td>Introduction to Inorganic and Physical Chemistry</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS**: 12

### REQUIRED COURSES: FOURTH SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-050</td>
<td>Instrumentation Process Control</td>
<td>3</td>
</tr>
<tr>
<td>ETEC-052</td>
<td>Applied Process Control</td>
<td>1</td>
</tr>
<tr>
<td>ETEC-056</td>
<td>Code for Instrument Application</td>
<td>1</td>
</tr>
<tr>
<td>ETEC-058</td>
<td>Analytical Instrumentation</td>
<td>2</td>
</tr>
<tr>
<td>ETEC-059</td>
<td>System Integration &amp; Troubleshooting</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR**: 45

**TOTAL UNITS FOR THE DEGREE**: 60

**TOTAL UNITS FOR THIS CERTIFICATE**: 45

### 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
36 total hours lecture, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-100 and MATH-025

An introduction to the 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, Recording Arts, Automotive Technology, 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.

LMC: DA
TRANSFER: CSU

ETEC-010 Direct Current Circuits
54 total hours lecture, 54 total hours lab
4 Units
ADVISORY: MATH-012; eligibility for ENGL-100

This is first semester course in the fundamentals of electricity and electronics. It will provide a good background in direct current circuits including Ohm’s law, component identification, and electrical terminology commonly used in the industry. Students will learn how electricity interacts with passive components. Emphasis will be placed upon the calculation, construction, and measurement of direct current circuits. The coordinated laboratory will teach the use of test equipment to measure circuits in order to perform circuit analysis. Students will apply the basic principles of DC circuits to develop troubleshooting techniques. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-012 Alternating Current Circuits
54 total hours lecture, 54 total hours lab
4 Units
ADVISORY: ETEC-010; MATH-012 or equivalent; eligibility for ENGL-100

This course will address calculation, construction, measurement and analysis of single phase alternating current RCL circuits. Magnetism, transformer theory, passive filters, vectorial analysis and power in alternating current circuits will be extensively covered. The coordinated lab will provide a thorough understanding of the concepts by way of experimentation and troubleshooting using laboratory test equipment. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-020 Electric Motor Control
36 total hours lecture, 72 total hours lab
3 Units
PREREQUISITE: ETEC-012
ADVISORY: MATH-012 or equivalent; eligibility for ENGL-100

This course is a study of electrical control circuits as they apply to industrial control systems. This course covers control components and their use in control systems as well as the use and development of electrical schematic and wiring diagrams. Lab work includes construction, analysis, testing and calibrating control circuits from a schematic diagram. Systematic trouble shooting techniques will be emphasized. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-022 Semiconductor Devices
18 total hours lecture, 54 total hours lab
2 Units
PREREQUISITE: ETEC-012
ADVISORY: Eligibility for ENGL-100

This course is study of active electronic semiconductor devices commonly used in analog and industrial control circuits. The analysis of the operational characteristics, biasing, power dissipation and application of each device will be explored. Also, included will be coordinated laboratory projects to help reinforce the theoretical and practical understanding of active semiconductors devices. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-024 Digital Devices
18 total hours lecture, 54 total hours lab
2 Units
PREREQUISITE: ETEC-012
ADVISORY: ETEC-022; eligibility for ENGL-100

This course of study will provide the student with the concepts of digital devices and circuitry commonly used in modern electronic circuits. The student will understand sequential logic circuits binary and hexadecimal numbering systems, binary math and the application of these subjects in industrial control systems. May not be repeated.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-030</td>
<td>Programmable Logic Controllers</td>
<td>54 lecture, 54 lab</td>
<td>4</td>
<td>PREREQUISITE: ETEC-012</td>
<td>ADVISORY: ETEC-020; EL-100; MATH-025</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETEC-032</td>
<td>Instrumentation and Process Measurement</td>
<td>54 lecture</td>
<td>3</td>
<td>PREREQUISITE: ETEC-012</td>
<td>ADVISORY: PHYS-015; MATH-025; EL-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETEC-034</td>
<td>Instrument Calibration Laboratory</td>
<td>54 lab</td>
<td>1</td>
<td>PREREQUISITE: ETEC-012</td>
<td>ADVISORY: PHYS-015; MATH-012; EL-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETEC-040</td>
<td>National Electric Code</td>
<td>54 lecture</td>
<td>3</td>
<td>CO-REQUISITE: ETEC-042</td>
<td>ADVISORY: ETEC-010, 012; MATH-012 or equivalent; EL-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETEC-042</td>
<td>Electrical Wiring Methods and Code Application</td>
<td>54 lab</td>
<td>1</td>
<td>CO-REQUISITE: ETEC-040</td>
<td>ADVISORY: ETEC-010, 012; MATH-012 or equivalent; EL-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETEC-044</td>
<td>Transformers and Power Distribution</td>
<td>36 lecture, 54 lab</td>
<td>3</td>
<td>PREREQUISITE: ETEC-012</td>
<td>ADVISORY: MATH-025 or equivalent; EL-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></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 systems 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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ETEC-046  DC & AC Motors and Generators
36 total hours lecture, 72 total hours lab
3 Units

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

A comprehensive study of Direct Current and Alternating Current Rotating electrical machinery. This course will include the identification, construction, connection, operation, and application of single and poly-phase motors and generators commonly found in today’s automated systems. The student will develop an understanding of the connection, reversal, torque characteristics and speed control of this equipment. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-050  Instrumentation - Process Control
54 total hours lecture
3 Units

CO-REQUISITE: ETEC-052
ADVISORY: ETEC-010, 012, 032, 034; PHYS-015; eligibility for ENGL-100

A course of study of the theory and application of process control. Process variables are measured, analyzed to control an Industrial Process. Students will learn theory of process control and the various types of final control elements and how they will affect the process. Students will use P&ID and specific instrument diagram to understand how the process is designed and they will learn techniques to adjust the process controller’s PID gain to obtain the best process response to an upset to the measured variable. The process variables will be graphed and analyzed to determine the appropriate controller response to an upset. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-052  Applied Process Control Lab
54 total hours lab
1 Unit

CO-REQUISITE: ETEC-050
ADVISORY: ETEC-010, 012, 032, 034, 050; PHYS-015; MATH-012; eligibility for ENGL-100

This course is a laboratory designed to give the student hands on experience with transducers and transmitters used to measure process variables and transmit proportional signals to a PLC, Loop controller or DCS I/O. Students will configure pneumatic, electronic and digital transmitters and connect them in measurement loops. They will calibrate the transmitters for use in pressure, level, temperature, pH and flow processes then check for accuracy, precision and linearity. Student will learn to use ISA standards and techniques to accurately prepare a transmitter for use in the field. The course is designed to be taken concurrently with ETEC-050 and provide the practical experience necessary to understand the fundamentals of process measurement. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-056  Codes for Instrument Application
18 total hours lecture
1 Unit

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

This course focuses on the National Electric Code regulations that govern wiring methods as they apply to hazardous locations, classified locations, remote signaling and power-limited circuits. Students will learn the theory or wiring design and installation and associated NEC regulations for Classes 1, 2, and 3, Division 1 and 2 hazardous locations. May not be repeated.

LMC: DA
TRANSFER: CSU

ETEC-058  Analytical Instrumentation
18 total hours lecture, 54 total hours lab
2 Units

ADVISORY: ETEC-010, 012, 032; PHYS-015; CHEM-006; MATH-012; eligibility for ENGL-100

This is a course in the fundamentals of analytical instrumentation which are necessary skills for process control in refineries, chemical plants and environmental protection. The student will learn to measure and control analytical properties such as, Ph, oxygen, conductivity, hydrocarbon and toxic gas. Emphasis will be on the operation of analytical test equipment and proper sampling techniques. May not be repeated.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETEC-059</td>
<td>System Integration and Troubleshooting</td>
<td>18</td>
<td>2</td>
<td></td>
<td>ETEC-012</td>
<td>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 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.</td>
</tr>
<tr>
<td>ETEC-098</td>
<td>Independent Study in Electrical/Electronic Technology</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.</td>
</tr>
<tr>
<td>ETEC-170</td>
<td>Occupational Work Experience Education in Electrical / Instrumentation Technology</td>
<td>60-400</td>
<td>1-4</td>
<td>Approved online application</td>
<td>Eligibility for ENGL-090</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. 12 units are transferable to CSU.</td>
</tr>
<tr>
<td>ETEC-180</td>
<td>Internship in Electrical / Instrumentation Technology</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application and employer placement</td>
<td>Eligibility for ENGL-090</td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
</tr>
<tr>
<td>ETEC-900s</td>
<td>Selected Topics in Electrical / Instrumentation Technology</td>
<td>60-300</td>
<td>1-4</td>
<td>Approved online application and employer placement</td>
<td>Eligibility for ENGL-090</td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
</tr>
</tbody>
</table>
Emergency Medical Services

COLLEGE SKILLS CERTIFICATES
Emergency Medical Services
Emergency Medical Services Recertification

Emergency Medical Services

REQUISITE COURSES: UNITS
EMS-010 Emergency Medical Technician I 8
TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 8

Emergency Medical Services Recertification

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

COURSE DESCRIPTIONS

EMS-004 Introduction to Standard First Aid/ CPR
6 total hours lecture, 9 total hours lab .5 Unit
ADVISORY: Eligibility for ENGL-090
This course is designed to give students the knowledge and skills necessary to maintain oxygenation and blood circulation in an adult, child, or infant who is demonstrating the signs of cardiac arrest. It includes basic first aid care and useful information about common medical and environmental injuries and illnesses. It meets the American Heart Association standards for “Heartsaver” certification. “An optional materials fee may be applied”. May not be repeated.
LMC: NDA

EMS-008 First Aid of Infants and Children
14 total hours lecture, 2 total hours lab
1 Unit
ADVISORY: Eligibility for ENGL-090
This course meets requirement for Core Content for Child Care Health and Safety Training/Education on Preventive Health Practices for the Department of Social Services Community Care Licensing (Health and Safety Code Section 1596.866) and includes pediatric cardiopulmonary resuscitation, pediatric first aid, recognition, management and prevention of infectious diseases, including immunizations, prevention of childhood injuries and implementing universal precautions in child care programs. “An optional materials fee may be applied”. May not be repeated.
LMC: DA

EMS-010 Emergency Medical Technician
108 total hours lecture, 108 total hours lab
8 Units
PREREQUISITE: Students must be 18 years of age by the date the course begins. Students must have Valid CPR card BLS for Healthcare providers by the American Heart Association, and it must remain valid for the duration of the EMS-010 class. Special note: Successful completion of EMS 14 meets the above prerequisite
ADVISORY: Eligibility for ENGL-090; Background checks, toxicology screenings and immunization for those students placed in Hospitals clinical internships. Medical clearance form and proof of inoculations, see below.
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 certification is the minimum requirement for ambulance attendants and is a prerequisite for paramedic programs and Fire Academies. Students are asked to be fully inoculated with documentation of TB, Hepatitis B, MMR, tetanus, and proof of varicella(chicken pox) and any other type of vaccination required by our partners in the Hospital or EMS providers in order for the student to be placed and complete clinical and or ambulance/Fire Department rotations. Also students must have a medical exam using DMV form 51 or LMC physical clearance form. Lastly, a lab fee of $65 dollars is payable to LMC, this provides the students with the following items: Blood pressure cuff and Stethoscope = $30, A Box of medical gloves = $10, Penlight and safety glasses = $10, EMT Polo Shirt = $15. May not be repeated.
LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
<th>Prerequisites/Advisory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-011</td>
<td>Emergency Medical Technician I Recertification</td>
<td>12</td>
<td>1</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>EMS-014</td>
<td>Healthcare Provider CPR</td>
<td>4</td>
<td>.3</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>EMS-017</td>
<td>Introduction to EKG Arrhythmias</td>
<td>18</td>
<td>1</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>EMS-098</td>
<td>Independent Study in Emergency Medical Services</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.</td>
</tr>
<tr>
<td>EMS-170</td>
<td>Occupational Work Experience Education in Emergency Medical Services</td>
<td>60-300</td>
<td>1-4</td>
<td></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.</td>
</tr>
<tr>
<td>EMS-180</td>
<td>Internship in Emergency Medical Services</td>
<td>60-300</td>
<td>1-4</td>
<td></td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
</tr>
<tr>
<td>EMS-900s</td>
<td>Selected Topics in Emergency Medical Services</td>
<td>60-300</td>
<td></td>
<td></td>
<td>DA varies with course content.</td>
</tr>
</tbody>
</table>
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.

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

AND SELECT TWO RESTRICTED ELECTIVES FROM:

| ENGIN-036 Engineering Statics                        | 3     |
| ENGIN-038 Manufacturing Processes                    | 3     |
| ENGIN-046 Engineering Dynamics                       | 3     |
| MATH-075 Linear Algebra                              | 3     |
| TOTAL UNITS 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

54 total hours lecture, 18 total hours lab
3 Units

PREREQUISITE: MATH-040 or equivalent

ADVISORY: Eligibility for ENGL-100

This course introduces the engineering profession. It includes the worldwide history of engineering and its influences on society and reviews the major engineering disciplines and the requirements for becoming an engineer. The course also introduces engineering reports, graphics, and presentations. Engineering calculations and a design project are an integral part of the course. Engineering ethics and the need for lifelong learning are also discussed. “An optional materials fee may be required.” May not be repeated.

LMC: ADR: Natural Sciences; DA
TRANSFER: UC, CSU
ENGIN-020 Programming with C++ for Engineers and Scientists
54 total hours lecture, 54 total hours lab
4 Units
PREREQUISITE: MATH-050
ADVISORY: Eligibility for ENGL-100

This course teaches computer programming using the C++ programming language’s syntax, control, and data structures. It includes object oriented programming techniques, introduces numerical techniques for scientific and engineering applications, and emphasizes optimal programming practices. Various aspects of the software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance are introduced. Case studies and software projects are significant parts of the course. Offered in the Spring semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-022 Programming with MATLAB for Engineers and Scientists
54 total hours lecture, 54 total hours lab
4 Units
CO-REQUISITE: MATH-060
ADVISORY: Eligibility for ENGL-100

This course teaches computer programming using the MATLAB’s syntax, control, and data structures. It includes object oriented programming techniques, introduces numerical techniques for scientific and engineering applications, and emphasizes optimal programming practices. Various aspects of the software life-cycle, including design, documentation, implementation, debugging, testing, and maintenance are introduced. Case studies and software projects are significant parts of the course. Offered in the Fall semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-025 Engineering Graphics
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: ENGIN-010; eligibility for ENGL-100

This course introduces descriptive geometry and engineering graphics techniques. Techniques include freehand and instrument drawing, while the primary emphasis is on computer aided drafting. Applications of descriptive geometry include orthographic drawings, sectional views, and auxiliary views. Axonometric, oblique, and perspective drawings are also covered. Other topics include revolutions, tolerances, dimensions, fasteners, springs, detail drawings, and assembly drawings. Offered in the Spring semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-030 Materials Science
54 total hours lecture, 54 total hours lab
4 Units
PREREQUISITE: CHEM-025 and PHYS-040
ADVISORY: Eligibility for ENGL-100

This is a lecture and lab course that investigates the relationships between microscopic structures and the macroscopic properties of engineering materials—including metals, ceramics, glasses, polymers, and composites. Mechanical, thermal, electrical, magnetic, and optical properties are also examined. Processes for producing and strengthening various materials are introduced. Certain failure mechanisms are also studied. “An optional materials fee may be applied.” Offered in the Fall semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-036 Engineering Statics
54 total hours lecture, 18 total hours lab
3 Units
PREREQUISITE: PHYS-040
ADVISORY: Eligibility for ENGL-100

This course is an introduction to the application of the concept of mechanical equilibrium to engineering problems. This course covers force systems in the context of supports, two force members and multi-force members, cables, truss structures, frames, and machines; geometrical properties, such as centroids and moments of inertia, friction, the method of virtual work, and sketching shear and bending moment diagrams. Problem solving methods include analytical, graphical, and computer techniques. ”An optional materials fee may be applied.” Offered in the Fall semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-038 Manufacturing Processes
36 total hours lecture, 54 total hours lab
3 Units
PREREQUISITE: ENGIN-025
CO-REQUISITE: Prior or concurrent enrollment in ENGIN-030
ADVISORY: Eligibility for ENGL-100

This course is an introduction to manufacturing processes, including: CNC machining, casting, forcible deformation processes, sintering, microfabrication, injection molding, and joining processes. Economic, environmental, and workability issues are examined to determine optimal manufacturing processes. “An optional materials fee may be applied.” Offered in the Fall semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU
ENGIN-045  Engineering Circuit Analysis

54 total hours lecture, 18 total hours lab
3 Units

PREREQUISITE: PHYS-041

CO-REQUISITE: Prior or concurrent enrollment in MATH-080

ADVISORY: Eligibility for ENGL-100

This is an introduction to electrical circuit analysis. It starts with passive d.c. circuits, includes controlled sources, and progresses to network analysis, including superposition, Thevenin and Norton equivalents, node and mesh analysis techniques. The course also includes analysis of circuits with energy storage elements, along with transient responses that are described by first- and second-order differential equations. The ideal op-amp model is introduced. Alternating current circuit analysis is developed, including the use of phasors, and applications are made to transformers, single phase, and three phase circuits. The course includes computer modeling of circuits. Offered in the Spring semester. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

ENGIN-046  Engineering Dynamics

54 total hours lecture
3 Units

PREREQUISITE: ENGIN-036

ADVISORY: Eligibility for ENGL-100

This course covers dynamics for engineering applications. It includes the kinematics and dynamics of particles, systems of particles, and rigid bodies in two and three dimensions. Also included are orbital motion, vibrations, Euler angles, and variable mass systems. Offered in the Spring semester. 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.

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

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

ENGIN-170  Occupational Work Experience Education in Engineering

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

ENGIN-180  Internship in Engineering

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application and employer placement

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

ENGIN-900s  Selected Topics in Engineering

DA varies with course content.
English

DEGREE—Associate in Arts Degree for Transfer

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.

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.

To earn the Associate in Arts in English for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

**REQUIRED CORE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-221</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-230</td>
<td>Thinking/Writing Critically about Literature</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-140</td>
<td>Survey of World Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-145</td>
<td>Survey of World Literature 2</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**LIST B: SELECT ONE COURSE (3 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-111</td>
<td>Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-127</td>
<td>The Mythology of Ethnic Americans</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-128</td>
<td>Asian American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-129</td>
<td>Introduction to Contemporary African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-132</td>
<td>Literature of the Imagination</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-133</td>
<td>Reflections: Representations of Race</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-205</td>
<td>California Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-220</td>
<td>Critical Analysis and Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL-231</td>
<td>Mystery &amp; Detective Fiction</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

**LIST C: SELECT ONE COURSE OR ONE COURSE NOT ALREADY USED FROM LIST B**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-112</td>
<td>Genres in Creative Writing</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN-024</td>
<td>Shakespeare's English Kings</td>
<td>3</td>
</tr>
<tr>
<td>JOURN-110</td>
<td>Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>DRAMA-016</td>
<td>Theatre Appreciation</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR**

18

**TOTAL UNITS FOR THE DEGREE**

60

Program Student Learning Outcomes - AA in English for Transfer

1. Independently read, comprehend, and analyze literature and non-fiction, using critical thinking strategies.
2. Respond coherently to texts in critical, creative and personal ways.
3. Write logical, coherent, well-developed academic essays about literature and non-fiction.

Program Student Learning Outcomes for Reading & Composition Sequence:

1. Read college-level texts independently and critically, and respond coherently to these texts in critical, creative, and personal ways.
2. Write coherent and well-developed academic essays that incorporate the readings and demonstrate adequate proofreading skills.
3. Develop the habits and learning abilities of a college student, such as using study skills, metacognitive skills, and college resources.

**COURSE DESCRIPTIONS**

**ENGL-015 Summer Bridge: How to Succeed in College English**

16 total hours lecture, 12 total hours lab
1 Unit

ADVISORY: Eligibility for ENGL-070, ENGL-090, or ENGL-100.

ENGL-015 supports students in making a successful transition into college English with an emphasis on the writing process, student skills, and college resources. The course culminates in a collaborative creative project that documents students’ successful transformations into new college students. May not be repeated.

LMC: DA
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
<th>Units</th>
<th>Advisory/Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-070</td>
<td>Fundamentals of English: Reading, Writing and Thinking</td>
<td>18 total hours lecture, 18 total hours lab, 72 total hours composition</td>
<td>5</td>
<td>Take English assessment test in the Assessment Center</td>
<td>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. LMC: NDA</td>
</tr>
<tr>
<td>ENGL-082</td>
<td>Building a College Vocabulary</td>
<td>54 total hours lecture</td>
<td>3</td>
<td></td>
<td>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. LMC: NDA</td>
</tr>
<tr>
<td>ENGL-083</td>
<td>Sentence Skills for College Writing</td>
<td>54 total hours composition</td>
<td>3</td>
<td>Eligibility for ENGL-090</td>
<td>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. LMC: DA</td>
</tr>
<tr>
<td>ENGL-090</td>
<td>Integrated Reading, Writing and Critical Thinking</td>
<td>18 total hours lecture, 18 total hours lab, 72 total hours composition</td>
<td>5</td>
<td>For ENGL-070, 071 or 070B; or demonstration of equivalent skills based on assessment</td>
<td>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. LMC: DA</td>
</tr>
<tr>
<td>ENGL-095</td>
<td>Accelerated Reading, Writing, and Critical Thinking</td>
<td>18 total hours lecture, 18 total hours lab, 72 total hours composition</td>
<td>5</td>
<td>Highly motivated to advance to English-100 in one intensive semester.</td>
<td>English-095 is an accelerated reading, writing, and critical thinking course designed to prepare students for college-level work. Students will read college-level material on contemporary topics and issues from a range of college disciplines, engage in discussion and essay-writing that demonstrates their understanding and analysis of these readings, and develop academic language skills. An accelerated course means that students will read, write, and discuss college-level material, but with extra support from the instructor. Students will participate in engaging, collaborative activities designed to enhance their skills and confidence. Successful completion of the course prepares the student for ENGL-100 and other college-level courses. May not be repeated. LMC: DA</td>
</tr>
<tr>
<td>ENGL-098</td>
<td>Independent Study in English</td>
<td>Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.</td>
<td>Independent study courses may be DA or transferable depending on specific course. See your counselor.</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. LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Type</td>
<td>Units</td>
<td>Prerequisites/Advisory</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------</td>
<td>-------</td>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENGL-100</td>
<td>College Composition</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td>ENGL-090; ENGL-095 or assessment process</td>
<td>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. (C-ID ENGL 100)</td>
</tr>
<tr>
<td>ENGL-111</td>
<td>Creative Writing</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>ENGL-112</td>
<td>Genres in Creative Writing</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td>ENGL-111</td>
<td>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.</td>
</tr>
<tr>
<td>ENGL-124</td>
<td>Children’s Literature</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td>Eligibility for ENGL-100</td>
<td>This course offers students the opportunity to read, discuss, and write about children’s and adolescent literature from a variety of historical periods, and covers the three main genres: short stories (including, myths, legends, fairy tales and folk tales), poetry and the novel. It includes works from the oral tradition to the present, and focuses on analyzing the works themselves and understanding their social and cultural contexts. This course also explores current issues and controversies in the field of children’s literature. May not be repeated.</td>
</tr>
<tr>
<td>ENGL-127</td>
<td>The Mythology and Literature of Ethnic Americans</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td>Eligibility for ENGL-100</td>
<td>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 literature’s reflect each group’s unique American experience. May not be repeated.</td>
</tr>
<tr>
<td>ENGL-128</td>
<td>Introduction to Asian American Literature</td>
<td>54 total hours lecture</td>
<td>3 Units</td>
<td>Eligibility for ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Units</td>
<td>Hours</td>
<td>Prerequisites</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ENGL-129</td>
<td>Introduction to Contemporary African-American Literature</td>
<td>3</td>
<td>54</td>
<td>Eligibility for ENGL-100 or concurrent enrollment in ENGL-090</td>
<td>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.</td>
</tr>
<tr>
<td>ENGL-132</td>
<td>Literature of Imagination: Myths, Tales, the Short Story, and the Novel</td>
<td>3</td>
<td>54</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.</td>
</tr>
<tr>
<td>ENGL-133</td>
<td>Reflections: Representations of Race, Ethnicity and Gender in Hollywood Films and Popular Fiction</td>
<td>3</td>
<td>54</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.</td>
</tr>
<tr>
<td>ENGL-135</td>
<td>Introduction to Lesbian, Gay, Bisexual, Transgender (LGBT) Studies</td>
<td>3</td>
<td>54</td>
<td>Eligibility for ENGL-100</td>
<td>Same as SOCSC-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.</td>
</tr>
<tr>
<td>ENGL-136</td>
<td>Introduction to Gender Studies</td>
<td>3</td>
<td>54</td>
<td>Eligibility for ENGL-100</td>
<td>Same as SOCSC-136. Introduction to Gender Studies introduces students to foundational concepts in the field of gender studies. This course compares and contrasts sociological perspectives used to interpret gender. Through the course, students will understand key terms in gender studies, identifying differences between sex and gender and examining how these terms function within a larger social context. The course asks students to understand the main agents behind gender construction for both children and adults while identifying how these constructions operate across social and cultural institutions. Also, students will recognize the relationships between race, ethnicity, class, and sexuality as well as how power is negotiated within those relationships. Finally, students will gain a firm understanding of the social and political movements that have worked to change gender inequalities. May not be repeated.</td>
</tr>
<tr>
<td>ENGLISH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ENGL-140 Survey of World Literature I: Antiquity to Mid-17th Century

54 total hours lecture
3 Units

PREREQUISITE: ENGL-100 or equivalent

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. (C-ID ENGL 140)

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ENGL-145 Survey of World Literature II: Mid-17th Century to Present

54 total hours lecture
3 Units

PREREQUISITE: ENGL-100 or equivalent

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. (C-ID ENGL 145)

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ENGL-150 Lesbian, Gay, Bisexual, Transgender Literature

54 total hours lecture
3 Units

ADVISORY: ENGL-135, eligibility for ENGL-100

Lesbian, Gay, Bisexual, and Transgender (LGBT) literature offers students the opportunity to foster a deeper understanding of and appreciation for literature that represents the worldviews and experiences of individuals and communities who have been marginalized throughout history on the basis of their non normative sexualities. LGBT literature surveys the imaginative writing that considers same-sex relationships and lesbian, gay, bisexual, and transgender themes from the classical period to the present, with a particular emphasis on 20th and 21st century texts. By studying texts that represent a broad span of human history and multicultural contexts, students will gain insight into the ways in which constructions of gender and sexuality have developed over time and understand the ways in which shifting cultural attitudes toward homosexuality have impacted the production and reception of literature dealing with same-sex desire and/or LGBT individuals and communities. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

ENGL-205 California Literature

54 total hours lecture
3 Units

PREREQUISITE: ENGL-100

This course presents literature written by Californians or that is about California, as a state and before. Students will read, discuss, and analyze the literature from a variety of genres: fiction and non-fiction, novels, short stories, diaries, poetry, drama, and film. The course and these genres will be taught from historical, social, economic, political, and ethnic perspectives. This is a transfer-level course that demands students maintain a high level of critical thinking (literal, interpretative, synthesis, and evaluative analysis) while learning about the canon of California literature. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B
ENGL-220  Critical Analysis and Inquiry
54 total hours lecture
3 Units
PREREQUISITE: ENGL-100
A critical investigation of meaning, its creation and transmission through the study of language processes and the application of the principles and criteria of critical thinking to reading and writing the argumentative essay. This course will examine the relationships between thought and language, including synthesis and the relationship to logic and meaning. Critical thinking criteria include: recognizing informal and formal fallacies, determining validity of arguments and points of view, separating fact from opinion and identifying biases. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area A3; IGETC Area 1B

ENGL-221  Advanced Composition and Critical Thinking
54 total hours composition
3 Units
PREREQUISITE: ENGL-100
This course is designed to provide advanced composition and critical thinking instruction beyond the English 100 level, with a focus on non-fiction reading, argument analysis, and academic writing. Students analyze and evaluate arguments from diverse perspectives on controversial, contemporary, relevant issues. Students learn to write well-reasoned, fully-developed argument essays and prepare for the level of work expected at 4-year institutions. May not be repeated. (C-ID ENGL 105)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area A3; IGETC Area 1B

ENGL-230  Thinking and Writing Critically about Literature
54 total hours composition
3 Units
PREREQUISITE: ENGL-100
This course continues the development of students' college-level skills in reading, critical thinking, writing, and research which begins in English 100, focusing on the literary genres of poetry, drama, the short story, and the novel. May not be repeated. (C-ID ENGL 120)
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2

ENGL-231  Mystery and Detective Literature
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
Mystery and Detective Literature course leads students in reading, discussing, and writing about mystery and detective stories and novels from a variety of historical periods, nations, and cultures. The history and development of the sub-genres will also be examined as well as the contributions of the mystery and detective novel to the evolution of literature in general. Since mystery and detective novels reward a close reading and celebrate the powers of observation, they offer an excellent opportunity to examine readings in depth while exercising the highest level of critical thinking. May not be repeated.
LMC: ADR: Arts and Humanities; DA
TRANSFER: UC, CSU Gen. Ed. Area C2; IGETC Area 3B

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

#### COURSE DESCRIPTIONS

**ESL-011  Vocabulary Development I**  
54 total hours lecture, 18 total hours lab  
3 Units  
ADVISORY: One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-021, ESL-031 and/or ESL-041

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.  
LMC: NDA

**ESL-012  Vocabulary Development II**  
54 total hours lecture, 18 total hours lab  
3 Units  
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.  
LMC: NDA

**ESL-013  Intermediate Text Skills**  
54 total hours lecture, 18 total hours lab  
3 Units  
PREREQUISITE: ESL-012 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test  
ADVISORY: Concurrent enrollment in ESL-023, 033, and/or ESL-043

ESL-013 is an intermediate level reading and vocabulary skills and strategies development course for English as a Second Language students. ESL-013 uses a process approach to teaching students how to engage a range of cognitive and meta-cognitive linguistic skills to improve their English language reading and vocabulary use abilities. Using theme-based organization and incorporating a variety of non-academic and academic types of texts - including newspaper articles, online texts, magazine articles, textbook articles, tables, charts, timelines, graphs, and reports - students are guided step-by-step through previewing, reading, and post-reading activities. The course makes use of reading, recall, and reinforcement to develop students’ ability to process information more quickly and holistically. This intermediate level ESL course also moves students from multiple choice and fill-in-the blank comprehension and vocabulary exercises to activities that require them to summarize and begin to infer information, as well as discuss and write about their own opinions and interpretations. In so doing, this course aims to help students become active readers by personalizing and broadening their understanding of what they read and how they learn. May not be repeated.  
LMC: NDA

**ESL-014  Advanced Text Skills**  
54 total hours lecture, 18 total hours lab  
3 Units  
PREREQUISITE: ESL-013 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test  
ADVISORY: Concurrent enrollment in ESL-024, 034, and/or ESL-044

ESL-014 is a high-intermediate to advanced level reading and vocabulary skills and strategies development course for English as a Second Language students. This course is the second of a two-semester upper-level text skills sequence. ESL-014 approaches reading and vocabulary instruction in an interactive and reciprocal process manner. Like ESL-013, this course teaches students how to engage a wide range of cognitive and meta-cognitive linguistic skills to improve their English language reading and vocabulary use abilities. The course is organized by themes that are approached from different angles via a variety of types of text. High-intermediate to advanced level skills and strategies are initially introduced separately and in a developmental manner. Then these skills are recycled, integrated, and built upon, giving students both a depth and breadth of application opportunities. This course also moves students from multiple choice and fill-in-the blank comprehension and vocabulary exercises to activities that require them to synthesize and infer information, as well as discuss and write about applications to other situations. In so doing, this course aims to help students become active readers by personalizing and broadening their understanding of what they read and how they learn. May not be repeated.  
LMC: NDA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL-021</td>
<td>Grammar for Communication I</td>
</tr>
<tr>
<td></td>
<td>72 total hours lecture</td>
</tr>
<tr>
<td></td>
<td>4 Units</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Current enrollment in ESL-011, ESL-031 and/or ESL-041</td>
</tr>
<tr>
<td></td>
<td>ESL-021 is a grammar course for English language learners at a novice/basic level of English language proficiency. ESL-021 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students’ everyday lives and a variety of interests. The course focuses on developing novice/basic students’ language ability through extensive exposure and practice that mainly includes focused and controlled exercises and some progressively more personalized and creative interactions. May not be repeated.</td>
</tr>
<tr>
<td></td>
<td>LMC: NDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL-022</td>
<td>Grammar for Communication II</td>
</tr>
<tr>
<td></td>
<td>72 total hours lecture</td>
</tr>
<tr>
<td></td>
<td>4 Units</td>
</tr>
<tr>
<td></td>
<td>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</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>LMC: NDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL-023</td>
<td>Grammar for Communication III</td>
</tr>
<tr>
<td></td>
<td>72 total hours lecture</td>
</tr>
<tr>
<td></td>
<td>4 Units</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: ESL-022 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Concurrent enrollment in ESL-013, 033, and/or ESL-043</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>LMC: NDA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL-024</td>
<td>Grammar for Communication IV</td>
</tr>
<tr>
<td></td>
<td>72 total hours lecture</td>
</tr>
<tr>
<td></td>
<td>4 Units</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: ESL-023 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Concurrent enrollment in ESL-014, 034, and/or ESL-044</td>
</tr>
<tr>
<td></td>
<td>ESL-024 is a grammar course for English language learners at a high-intermediate to advanced level of proficiency. ESL-024 uses a dual integrated skills and communicative approach to teach a selection of level-appropriate grammatical structures. Students learn grammar through listening, reading, speaking, and writing activities that offer opportunities to discover, analyze, practice, and produce a variety of grammar points. Grammar content is taught via social and situational themes and contexts that are relevant to adult students’ everyday lives and a variety of interests. The course focuses on developing high-intermediate to advanced students’ language ability through extensive exposure and practice that includes focused and controlled exercises to progressively more personalized and creative interactions. May not be repeated.</td>
</tr>
<tr>
<td></td>
<td>LMC: NDA</td>
</tr>
</tbody>
</table>
ESL-031  Conversation/Pronunciation I
54 total hours lecture, 18 total hours lab 3 Units
ADVISORY: One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-011, ESL-021 and/or ESL-041
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.
LMC: NDA

ESL-032  Conversation/Pronunciation II
54 total hours lecture, 18 total hours lab 3 Units
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.
LMC: NDA

ESL-033  Intermediate Oral Skills
54 total hours lecture, 18 total hours lab 3 Units
PREREQUISITE: ESL-032 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test
ADVISORY: Concurrent enrollment in ESL-013, 023, and/or ESL-043
ESL-033 is a speaking, listening, and critical thinking course for English language learners at an intermediate level of language proficiency. ESL-033 uses project based learning and communicative language teaching approaches to teach a selection of level-appropriate oral communication skills and strategies. Students learn these skills and strategies through activities that offer opportunities to build their vocabulary and concept knowledge, demonstrate their comprehension, apply their understanding, internalize and analyze information, synthesize their learning, and evaluate their progress. Oral communication content is taught via social, 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.
LMC: NDA

ESL-034  Advanced Oral Skills
54 total hours lecture, 18 total hours lab 3 Units
PREREQUISITE: ESL-033, or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test
ADVISORY: Concurrent enrollment in ESL-014, 024, and/or ESL-044
ESL-034 is a speaking, listening, and critical thinking course for English language learners at a high-intermediate to advanced level of language proficiency. ESL-034 uses a communicative language teaching approach to teach a selection of level-appropriate oral communication skills and strategies. Students learn these skills and strategies through activities that offer opportunities to build their vocabulary and concept knowledge, demonstrate their comprehension, apply their understanding, internalize and analyze information, synthesize their learning, and evaluate their progress. Oral communication content is taught via social, professional, and academic themes that are relevant to adult students’ everyday lives and a variety of interests. The course focuses on developing high-intermediate to advanced students’ language ability progressively by 1) concentrating initially on receptive language development and then productive language development, and 2) engaging students in activities that are increasingly more sociolinguistically interactive and cognitively challenging. May not be repeated.
LMC: NDA

ESL-041  Writing and Reading I
72 total hours lecture 4 Units
ADVISORY: One year of formal English as a Second Language instruction, or a level one placement on the ESL placement test. Concurrent enrollment in ESL-011, ESL-021 and/or ESL-031
ESL-041 is a writing and reading course for students of English as a second language who currently find themselves at a novice/basic level of English development. Through reading academic and narrative texts on familiar and concrete topics, students are taught to predict, summarize, contrast, and synthesize readings while learning new vocabulary. These skills in turn lead students to develop their writing abilities and to become strong writers by applying correct sentence structure, spelling, and mechanics of English to their writing. ESL-041 utilizes a problem-posing approach where language is acquired through student negotiation as a means to successful second language communication. May not be repeated.
LMC: NDA
ESL-042 Writing and Reading II
72 total hours lecture
4 Units
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 a high beginning level of English development. Through reading of personal, professional, academic and literary texts, which may include non-adapted/authentic texts written for native English speakers, students are taught to write one or more paragraphs that have a clear, beginning, middle, and end. Furthermore, students learn how to produce a variety of sentence structures with emerging control over perfect tenses. These skills in turn lead students to develop their writing abilities and to become strong writers by applying correct sentence structure, spelling, and mechanics of English to their writing. ESL-042 utilizes a problem-posing approach where language is acquired through student negotiation as a means to successful second language communication. May not be repeated.

LMC: NDA

ESL-043 Writing and Reading III
72 total hours lecture
4 Units
PREREQUISITE: ESL-042 or a level three placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test
ADVISORY: Concurrent enrollment in ESL-013, 023, and/or ESL-033

ESL-043 is a writing and reading course for students of English as a second language who currently find themselves at an intermediate level of English development. Through readings which include both expository and narrative texts, with some level of abstraction, students are taught to write essays with clear thesis statements using various rhetorical modes (350+ words). At the end of the course, students will write well developed essays while integrating a wide range of vocabulary. May not be repeated.

LMC: NDA

ESL-044 Writing and Reading IV
72 total hours lecture
4 Units
PREREQUISITE: ESL-043 or a level four placement on the ESL placement test; or an ENGL-070 placement on the ESL placement test
ADVISORY: Concurrent enrollment in ESL-014, 024, and/or ESL-034

ESL-044 is a writing and reading course for students of English as a second language who currently find themselves at a high intermediate/advanced level of English development. Through readings which are predominantly expository, including argumentative, research-based, and abstract ideas, students are taught to write expository essays which reference outside sources, including non-fiction, using a variety of rhetorical strategies (500-750 words.) May not be repeated.

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.

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
90 total hours lecture
5 Units
ADVISORY: Eligibility for ENGL-090
A visual/oral/aural approach to understanding, speaking, reading, and writing Filipino as it is used in the Philippines. The content used in learning the language is drawn from the rich Filipino culture. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

FILIP-061 Elementary Filipino II
90 total hours lecture
5 Units
PREREQUISITE: FILIP-060 or two years of high school Filipino
ADVISORY: Eligibility for ENGL-090
Continuation of the visual/oral/aural approach to understanding, speaking, reading, and writing Filipino. This is the second course of a two-semester sequence. Course material emphasizes the Filipino culture. It is highly recommended that FILIP-061 be taken immediately after completion of FILIP-060. May not be repeated.
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.
LMC: 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 AND CERTIFICATE OF ACHIEVEMENT
FIRE TECHNOLOGY

For the Associate of Science Degree in Fire Technology, 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>FIRE-101</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-102</td>
<td>3</td>
</tr>
<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>
<tr>
<td>FIRE-107</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS  18

ELECTIVES: COMPLETE A TOTAL OF 6 UNITS FROM THE LIST BELOW:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-106</td>
<td>1</td>
</tr>
<tr>
<td>FIRE-170</td>
<td>1-4</td>
</tr>
<tr>
<td>EMS-010</td>
<td>8</td>
</tr>
<tr>
<td>EMS-004</td>
<td>1</td>
</tr>
<tr>
<td>BUS-086</td>
<td>3</td>
</tr>
<tr>
<td>SPCCH-110</td>
<td>3</td>
</tr>
<tr>
<td>PHIL-041</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS  6

TOTAL UNITS FOR THE MAJOR  24

TOTAL UNITS FOR THE DEGREE  60
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.
4. Explain and interpret Fire Service Terminology.
5. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment.

CERTIFICATE OF ACHIEVEMENT

FIRE ACADEMY

The Basic Fire Academy program prepares students for the California State Firefighter I Certificate. Prerequisites for the Basic Fire Academy include: 1. Successful completion (C grade or better) in Fire 101 and Fire 107, 2. a positive evaluation (sports physical) from an approved medical facility, 3. satisfactory score on the Candidate Physical Agility Test (CPAT) or successful completion of Fire 106 and 4. Proof of medical insurance.

REQUIRED COURSES: FIRST SEMESTER

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-101</td>
<td>Fire Protection Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRE-106</td>
<td>Physical Fitness for Public Safety Personnel</td>
<td>1</td>
</tr>
<tr>
<td>FIRE-107</td>
<td>Firefighter Safety and Survival</td>
<td>3</td>
</tr>
</tbody>
</table>

SECOND SEMESTER:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-120</td>
<td>Basic Fire Academy</td>
<td>15</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THIS CERTIFICATE 22

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>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRE-120</td>
<td>Basic Fire 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>DESCRIPTION</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>
</tbody>
</table>

SELECT 6 UNITS FROM THE FOLLOWING:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</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</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR 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 TECHNOLOGY

**FIRE Protection**

**REQUISITE COURSES:**  
**REQUISITE COURSES (3 units):**

- **FIRE-101 Fire Protection Organization**
- **FIRE-102 Fire Behavior**
- **FIRE-107 Firefighter Safety**

**SELECT 6 UNITS FROM THE FOLLOWING:**

- **FIRE-103 Fire Protection Systems**
- **FIRE-104 Building Construction Fire**
- **FIRE-105 Fire Protection**

**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. 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.

**LMC:** DA

**TRANSFER:** CSU

**FIRE-101 Fire Protection Organization**

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-090

Survey of career opportunities in California Fire and Emergency Management Services and related fields. This is the basic core class within the fire technology program. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

**FIRE-102 Fire Behavior and Combustion**

54 total hours lecture  
3 Units  
ADVISORY: FIRE-101; eligibility for ENGL-090

Fundamentals and scientific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxin materials, forms of energy and fire prevention/suppression techniques of all types of fires. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

**FIRE-103 Fire Protection Equipment and Systems**

54 total hours lecture  
3 Units  
ADVISORY: FIRE-101 and FIRE-102; eligibility for ENGL-090

An overview of fire protection equipment and systems includes portable fire extinguishing equipment; protection systems; special hazards, sprinkler systems and fire detection systems. Fire Protection systems are continually changing due to technology and different types of occupancies need different types of fire protection. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

**FIRE-104 Building Construction Related to the Fire Service**

54 total hours lecture  
3 Units  
ADVISORY: FIRE-101 and 103; eligibility for ENGL-090

This course covers fundamentals of building construction as it relates to fire protection. Classification of occupancy and types of construction with an emphasis on fire protection features including building equipment, facilities, and fire resistant materials. This course is required for Public Safety majors at CSUs. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU

**FIRE-105 Fundamentals of Fire Prevention**

54 total hours lecture  
3 Units  
ADVISORY: FIRE-101 and FIRE-102; eligibility for ENGL-090

An overview of the history, organization and functions of fire prevention efforts includes inspection; fire investigation; recognizing and solving fire and life hazards; enforcing solutions and public relations. May not be repeated.

**LMC:** DA

**TRANSFER:** CSU
FIRE-106 Physical Fitness for Public Safety Personnel

54 total hours of activity
1 Unit

This course prepares students for the physical demands of a public safety career and prepares them for the entry level physical agility exam. Students are introduced to the tools and proper procedures for the physical requirements public safety positions require including carrying, lifting, climbing, and pulling equipment as well as proper physical rescue techniques. Also included are aerobic workouts designed to improve cardiovascular endurance, strength training and flexibility. May not be repeated.

LMC: DA
TRANSFER: CSU

FIRE-107 Fire Fighter Safety and Survival

54 total hours lecture; 12 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-090

This course is designed for those seeking entry into, as well as those professionally employed in the fire service. This course is required by the California State Fire Marshal as it covers key topics to keep firefighters safe in the course of their job. Topics include assessing fire dangers and handling common fire situations in the home and in the workplace, risk abatement and personal preparation for unforeseen fire emergencies, and roles and responsibilities in educating the public on fire safety. May not be repeated.

LMC: DA
TRANSFER: CSU

FIRE-120 Basic Fire Academy

228 total hours lecture, 152 total hours lab
15 Units

PREREQUISITE: Fire 101 and Fire 107 or equivalent; satisfactory completion of an Emergency Medical Technician training program including National Registry Certification; satisfactory completion of Fire 106 or challenged with a satisfactory completion of the Candidate Physical Ability Test (CPAT) or equivalent; Successful clearance of standard medical physical exam within 6 months prior to start of Fire academy.

ADVISORY: Eligibility for ENGL-090 or ENGL-100

The Basic Fire Academy prepares students for entry-level jobs in firefighting careers. This course proves to be extremely helpful in helping students prepare for jobs serving as volunteer, reserve and career firefighters. Many Fire agencies require a Firefighter Academy prior to application. The academy also leads toward California State Firefighter 1 Certification. The California State Firefighter 1 curriculum, guidelines and assessments are closely followed and delivered throughout this program. Standards of performance in written exams and skill demonstrations are established by the International Fire Service Association (IFSTA) and supported local fire agencies. This basic fire academy offered at Los Medanos College is fully accredited by the California State Fire Marshal. California State Board of Fire Services/Firefighter I approved. Mandatory and California State Board of Fire services concerning Firefighter 1. Mandatory fees apply for State Certificates offered in this program. May not be repeated.

LMC: DA
TRANSFER: CSU

FIRE-130 Advanced Fire Academy

198 total hours lecture, 442 total hours lab
19 Units

PREREQUISITE: Employment as a firefighter in a Contra Costa County Fire District or a total of 9 units from FIRE-101, 102, 103, 104, 105, or 106; satisfactory score on the Candidate Physical Agility Test (CPAT) or equivalent; meet National Fire Protection Association (NFPA) 1582 medical assessment; current Emergency Medical Technician (EMT) certification.

The Advanced Firefighter I Academy prepares students for entry-level jobs in firefighting and for California State Firefighter I certification. The California State Firefighter I curriculum, guidelines and assessments are followed throughout the program. Standards of performance in written exams and skill demonstrations are established by the International Fire Service Training Association (IFSTA) and local fire agencies. This academy is approximately 16 weeks in length and uses a Monday-Friday, 40 hour per week schedule. Accredited by the Office of the California State Fire Marshal. May not be repeated.

LMC: DA
TRANSFER: CSU

FIRE-140 Fire Apparatus Driver/Operator 1A: Emergency Vehicle Operations

18 total hours lecture, 22 total hours lab
1.5 Units

PREREQUISITE: California Drivers License, Class B, fire fighter restricted (minimum)

ADVISORY: Fire Fighter I training recommended

This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions. Optional State Fire Marshal certification fee applies. May not be repeated.

LMC: DA
TRANSFER: CSU
### FIRE-141 Fire Apparatus Driver/Operator 1B: Pump Operations

<table>
<thead>
<tr>
<th>18 total hours lecture</th>
<th>22 total hours lab</th>
<th>1.5 Units</th>
</tr>
</thead>
</table>

**PREREQUISITE:** Drivers License, Class B, fire fighter restricted (minimum)

**ADVISORY:** Fire Fighter I training recommended

This course provides the student with information on pump construction and theory of pump operations. Topics include: methods for performing basic hydraulics and techniques of basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions. Optional State Fire Marshal certification fee applies. May not be repeated.

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

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

<table>
<thead>
<tr>
<th>60-300 total hours</th>
<th>1-4 Units</th>
</tr>
</thead>
</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 a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.

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

### FIRE-180 Internship in Fire Technology

<table>
<thead>
<tr>
<th>60-300 total hours</th>
<th>1-4 Units</th>
</tr>
</thead>
</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, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.

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

### FIRE-900s Selected Topics in Fire Technology

**DA** varies with course content.
French

COURSE DESCRIPTIONS

FRNCH-060 Elementary French I
90 total hours lecture
5 Units
ADVISORY: Eligibility for ENGL-090
A visual/oral/aural approach to understanding, speaking, reading, and writing French as it is used in France and other Francophone countries. The content used to learn the language will be drawn from the rich French and Francophone countries and cultures. This course is equivalent to two years of high school French. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

FRNCH-061 Elementary French II
90 total hours lecture
5 Units
PREREQUISITE: FRNCH-060
ADVISORY: Eligibility for ENGL-090
French 61 is the continuation of French 60 of a three semester series of speaking, reading, and writing French as it is used in France and Francophone countries such as Canada, Belgium, Switzerland, and Monaco, as well as in the French-influenced cultures of North Africa, Africa, Haiti and Tahiti. The content used in learning is drawn from the rich French, Canadian, Swiss, Belgian and various African cultures, including, but not limited to those of Tunisia, Algeria and Morocco, as well as those of Cameroun and La Cô te d'Ivoire. It is highly recommended that upon successful completion of FRNCH-061, the third course FRNCH-062 be taken the following semester. Credit by Exam (CBE) available for this course. Please check with counselors and details for CBE are listed on the World Languages page of the LMC Web site. May not be repeated.
LMC: DA
TRANSFER: UC; CSU GE Area C2; IGETC Area 3B, 6

FRNCH-062 Intermediate French I
90 total hours lecture
5 Units
PREREQUISITE: FRNCH-061 or 3 years of high school French
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.
LMC: DA
TRANSFER: UC; CSU GE Area C2; IGETC Area 3B, 6

FRNCH-098 Independent Study in French
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

FRNCH-900s Selected Topics in French
DA varies with course content.
History

DEGREE—Associate in Arts for 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.

To earn the Associate in Arts in History for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education-Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUIRED CORE COURSES: (6 UNITS)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST-029</td>
<td>United States History Until 1865</td>
<td>3</td>
</tr>
<tr>
<td>HIST-030</td>
<td>United States History From 1865</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL REQUIRED UNITS</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

LIST A - TWO COURSES (6 UNITS)

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST-039</td>
<td>Ancient World History Until 1500 C.E.</td>
<td>3</td>
</tr>
<tr>
<td>HIST-040</td>
<td>Modern World History From 1500 C.E.</td>
<td>3</td>
</tr>
</tbody>
</table>

LIST B - CHOOSE ONE COURSE: (MINIMUM 3 UNITS)

AREA 1

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST-046</td>
<td>History and Culture of Native Americans through 1830</td>
<td>3</td>
</tr>
<tr>
<td>HIST-047</td>
<td>Native Americans from Am. Revolution to Present</td>
<td>3</td>
</tr>
<tr>
<td>HIST-052</td>
<td>Mexican American History 1900 to Present</td>
<td>3</td>
</tr>
<tr>
<td>POLSC-043</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC-045</td>
<td>Issues Confronting African Americans</td>
<td>3</td>
</tr>
</tbody>
</table>

AREA 2

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON-005</td>
<td>Economic History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>PHIL-042</td>
<td>Comparative Religion</td>
<td>3</td>
</tr>
<tr>
<td>POLSC-010</td>
<td>Introduction to American Government</td>
<td>3</td>
</tr>
<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>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 18-20

TOTAL UNITS FOR THE DEGREE 60

Program Student Learning Outcomes

1. Demonstrate the ability to analyze, evaluate, and synthesize historical data into independent interpretations.
2. Understand and value the importance of diverse perspectives in history.
3. Analyze the cause and effects of historical events.
4. Organize and express their thoughts clearly and coherently in both oral and written formats.
HIST-029 United States History until 1865
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course surveys the social, political, and cultural history of the United States from colonial beginnings through 1865. Major topics will include the nature and patterns of early settlement, development of slavery and racism, as well as the development of American political traditions. The course offers a multicultural history of the United States by incorporating the histories of diverse peoples, including African-American, Native American, Latino/a American, and Euro-American perspectives. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-030 United States History from 1865
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course surveys the social, political, economic, and cultural history of the United States from 1865 to the present. Major topics to be covered include the expansion of the federal state, America’s growing influence overseas, and political realignments from the late 19th to early 21st centuries. The experiences of groups from diverse backgrounds will be considered, including African-American, Native-American, Latino/a American, and Asian-American. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-031 California History
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This survey course covers the history of California from its Native California origins to the present (Native California, Spanish, Mexican, and American Periods) with a focus on the unique geography of California, and how that shaped its history. Particular focus will be on the contributions that ethnic and cultural minorities and women have made to the political, social, cultural, and economic development and history of California. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-033 Historians: Their Worlds & Their Craft
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
An introduction to the idea and practice of history as a distinctive mode of human knowledge. Accepting that among nature’s organisms only humans have and need history, and that history itself may be regarded as a “true story about the human past,” this course will study historians who have contributed significantly to the 2500-year-old development of history as an ever-evolving tradition of human self-understanding. The course will proceed chronologically, critically, typologically and comparatively. It will focus on the lived contexts, representative texts and enduring legacies of selected historians. The completion of HIST-033 partially satisfies the requirement for a lower division history major. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-034 Western Inheritance in Global Perspective: Ancient World History
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course covers major events and cultural trends in the historical evolution of Western civilization from the inception of Western civilization to the 16th Century. It analyzes historical events from the perspective of the people in power as well as those on the periphery. Analysis of the evolution of the empires of Egypt, Greece and Rome will be a point of emphasis as well as social movements, philosophy, architecture, and characteristics of the Middle Ages to the Age of Exploration. May not be repeated. (C-ID HIST 170)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F
HIST-035  Western Inheritance in Global Perspective: Modern World History
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course covers major events and cultural trends in the historical evolution of Western civilization from the 16th century to the 21st century. It analyzes historical events from the perspective of the people in power as well as those on the periphery. Analysis of revolutions, wars, and social movements will be a point of emphasis. Topics will include, but are not limited to: French, Russian, Scientific, and Industrial Revolution; the Protestant Reformation and the Wars of Religion; French absolutism, English constitutionalism, war trade and empire; nationalism, imperial rivalry, and the world wars; the fall of communism and modern Europe. May not be repeated. (C-ID HIST 180)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-038  Contemporary U.S. History
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course will examine contemporary U.S history from World War II to the present. From a socially inclusive, trans-cultural and trans-national perspective students will critically evaluate the historical implication of U.S. cultural hegemony and imperial preeminence over other world nations and people. The course will address problems as follows: With reference to our national past, to what extent is our current, hegemonic 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.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-039  Ancient World History: Peoples and Their Governance until 1500 C.E.
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
An introduction to the ancient history of world peoples, beginning with nature’s ancestry in a “Big Bang” universe and extending to the fateful era of “Columbian Exchange.” Topics covered are periods and patterns of human life as it develops from conditions of resource foraging (Paleolithic cultures); toward resource cultivation (Agrarian cultures); and culminating with intensified resource extraction sufficient to sustaining an interlinked “Civilization” way-of-life (modern urban-market cultures). May not be repeated. (C-ID HIST 150)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F

HIST-040  Modern World History: Peoples and Their Governance From 1500 C.E.
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
An introduction to the modern history of world peoples as it develops from multiple transcontinental and transoceanic encounters between ethnic strangers, and pointing toward the emergence of a 21st century global “culture-of-humanity.” The course will proceed chronologically, comparatively, typologically and critically. At appropriate intervals contrasting and variable forms of human governance will be considered—effective governance regarded as crucial to human resilience when adapting to changing planetary realities. May not be repeated. (C-ID HIST 160)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4F
HIST-046  History and Cultures of Native Americans in North America (from Pre-European Contact Through 1838)

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

This survey course covers the history of Native American peoples from their origins to the period of removal 1838 by the United States government. The focus of this course will be on the diversity of Native American cultures, socially, geographically, politically, economically, architecturally, and spiritually. Particular focus will be on cultural and religious conversion of Native Americans, often times willingly as a means of survival, but most often forced upon them by European newcomers; colonization by the Spanish, French and English; autonomy; diplomacy and warfare; trade and exchange networks; the ethical impact of U.S. policy removal, and Native American response and resistance movements; and the historical perspective of the “savage” stereotype and efforts to “Christianize and civilize” Native Americans. May not be repeated.

LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4C

HIST-047  History and Cultures of Native Americans in North America (from 1830 to the Present)

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

This survey course covers the history of Native American Indians with a brief introduction of the removal period and beginning with their fight for western lands in the 1830s to the end of the Twentieth Century and their fight for rights and resources. The focus of this course will be on the continuous struggle and fight for sovereignty by Native American cultures. Particular focus will be on the fight for western lands; adapting to a changing world; civilizing Native Americans through Americanization and the educational assault; the survival and endurance of social, political, cultural, and religious traditions; modern Indian warfare through critical analysis of the second Wounded Knee and the takeover of Alcatraz Island, and the rise of Indian militancy; and the rise of reservation life, poverty, violence, unemployment, and alcohol dependency. May not be repeated.

LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4C

HIST-052  Mexican American History (1900 to Present)

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

This survey course covers the history of Mexican Americans from 1900 to the present. This course will cover social, cultural, political, economic, and gender issues. There will be a specific focus on the Great Migration and the impact of immigration, labor and union organization, and repatriation; Mexican American women in the labor force and their struggle to balance and challenge patriarchal and cultural traditions; the formation of early Mexican and Mexican American civil rights organizations known as mutualistas; cultural disintegration through Americanization programs; Mexican American Patriotism and nativist sentiments; the formation of Mexican American civil rights organizations such as League of United Latin American Citizens and Mexican American Legal Defense and Education Fund; the Chicano movement; and the fight in the fields - Huelga! May not be repeated.

LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4G

HIST-055  History of Sexuality in North America

54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100

This course surveys the social construction of sexualities in North America from the colonial period through the present. The course will focus on understanding how the expression and regulation of sexuality both structured cross-cultural contact in North America and contributed to social order and control. Particular emphasis is placed on understanding how the regulation of sexuality both contested and reinforced other hierarchies of power such as race, class, and gender. May not be repeated.

LMC: ADR: Social and Behavioral Sciences; Ethnic/Multicultural Studies: DA
TRANSFER: CSU Gen. Ed. Area D
### Program Requirements, Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST-061</td>
<td>History of African-Americans since 1865</td>
<td>3</td>
<td>This course surveys the African-American experience in the United States from 1865 to the present. Major course themes include the end of slavery and Reconstruction, African-American migrations and urbanization experiences, Jim Crow and segregation as well as the Civil Rights Movement. The course examines the development of African-American economic, social, and political institutions and the impact these have had on American society and culture. The course also surveys African-American interaction with federal, state, and local governments, especially with respect to the U.S. Constitution. May not be repeated.</td>
</tr>
<tr>
<td>HIST-098</td>
<td>Independent Study in History</td>
<td>3</td>
<td>Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. Minimum 1 hour per week with instructor plus 54 hours of contracted work for each unit of credit. May not be repeated.</td>
</tr>
<tr>
<td>HIST-900s</td>
<td>Selected Topics in History</td>
<td></td>
<td>DA varies with course content.</td>
</tr>
</tbody>
</table>

### Humanities

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN-019</td>
<td>Ancient Humanities</td>
<td>3</td>
<td>An integrated, interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, that focuses on the period from the first civilizations of Mesopotamia and Egypt through the pinnacle of the Roman Empire under the Caesars. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. May not be repeated.</td>
</tr>
<tr>
<td>HUMAN-020</td>
<td>Medieval and Renaissance Humanities</td>
<td>3</td>
<td>An integrated interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, focusing on the period from the late Roman Empire through the Renaissance and Reformation. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. This course meets the general education requirement for humanities. May not be repeated.</td>
</tr>
<tr>
<td>HUMAN-021</td>
<td>Modern Humanities</td>
<td>3</td>
<td>An integrated, interdisciplinary approach to history, religion, philosophy, literature, art and music as aspects of Western culture and civilization, that focuses on the period from the Scientific Revolution of the 16th century through the advent of World War in the 20th century. In this broad context, students will investigate the intellectual, spiritual, cultural and political foundations of the Modern World. May not be repeated.</td>
</tr>
</tbody>
</table>

### Transfer

- UC
- CSU Gen. Ed Area C2
- IGETC Area 3B
HUMAN-022  American Humanities

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

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.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-024  Shakespeare's English Kings: History, Literature and Drama

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An integrated, interdisciplinary approach to history, literature and drama through the study of Shakespeare’s plays based on the Plantagenet kings from Edward III to Richard III, and focusing on English history from 1337 to 1485. This dynamic period of international war, dynastic struggle and regicide chronicles England’s evolution from a medieval kingdom to a modern nation. The events of history will be investigated in light of Shakespeare’s artistic license with that history in crafting popular dramas. Students will address Shakespearean language, dramaturgy, issues of staging and performance, as well as the political and cultural conditions of England during the period covered by the play as well as Shakespeare’s era that shape the plays. Meets humanities requirements for general education. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-030  Modernist Paris: Artists and Intellectuals (1890-1950)

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An integrated interdisciplinary approach to intellectual and cultural history, using the productions of modernism, philosophy, literature, art, music, dance and film, and focusing on Paris as a nexus of creative thought in the period from the late 19th century through the mid-20th. In this broad context, students will investigate the intellectual, artistic and philosophical foundations of modernism in Western culture. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

HUMAN-035  Themes in Mesoamerican Culture through Ceramics

45 total hours lecture, 36 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-100

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.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3B

HUMAN-098  Independent Study in Humanities

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

HUMAN-900s  Selected Topics in Humanities

DA varies with course content.
Italian

COURSE DESCRIPTIONS

ITAL-060  Elementary Italian I
90 total hours lecture
5 Units
ADVISORY: Eligibility for ENGL-090
A visual/oral/aural approach to understanding, speaking, reading, and
writing Italian as it is used in Italy and other Italian speaking coun-
tries. Italian is also spoken in Switzerland, communities in Argentina,
Canada, Australia and in many urban centers of the United States. The
content used in learning the language is drawn from the rich Italian
culture. This course is equivalent to two years of high school Italian.
May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

ITAL-061  Elementary Italian II
90 total hours lecture
5 Units
PREREQUISITE: ITAL-060 or two years of high school Italian
Italian 61 is the continuation of Italian 60 of a two semester series of
speaking, reading, and writing Italian as it is used in Italy and Ital-
ian- influenced communities such as Canada, Argentina, Australia
Switzerland, and many urban centers of the Unites States. It is highly
recommended that upon successful completion of Italian-061, stu-
dents consider pursuing the study of Italian at Diablo Valley College or
other institutes of higher learning the following semester, or consider
the semester abroad program to study in Florence, Italy. May not be
repeated.
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. Mini-
mum 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 de-
pending 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 practi-
cial 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 gradu-
ation 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-161A  Visual Storytelling Practicum I 1
JOURN-130  Media Production: Practicum I 3
ELECTIVE  Select from accompanying list 3

REQUIRED COURSES: 3RD SEMESTER  UNITS
JOURN-115B  Media Writing Practicum II 1
or  JOURN-161B  Visual Storytelling Practicum II 1
JOURN-131  Media Production: Practicum II 3

REQUIRED COURSES: FOURTH SEMESTER  UNITS
JOURN-115C  Media Writing Practicum 1
or  JOURN-161C  Visual Storytelling Practicum
The beginning journalism practicum in the other course
sequence (115 A or 116 A)
JOURN-100  Mass Communication 3

TOTAL UNITS FOR THE MAJOR 21
TOTAL UNITS FOR THE DEGREE 60
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, 1 unit
LIBST-018: Internet Information Resources – Advanced Search Techniques and Strategies, 1 unit

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. 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.

To earn the Associate in Arts in Journalism for Transfer degree, a student must complete 60 transferable semester units that include:
1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUIRED CORE COURSES: 9 UNITS
JOURN-100 Mass Communication
JOURN-110 Writing for the Media
JOURN-130 Media Production: Practicum I

LIST A (COURSES SUPPORTING THE CORE): 3 UNITS
JOURN-131 Media Production: Practicum II
JOURN-160 Photojournalism

LIST B (ELECTIVES): 6 UNITS FROM THE FOLLOWING:
ART-005 Designing with Adobe InDesign
ECON-010 Principles of Microeconomics
ECON-011 Principles of Macroeconomics
ENGL-221 Advanced Composition and Critical Thinking
MATH-034 Introduction to Statistics
POLS-010 Introduction to American Government: Institutions and Ideals
POLSC-010 Introduction to Politics: Institutions and Ideals
SOCIO-016 Introduction to Social Problems
ANTHR-007 Culture Change and Globalization
SPCH-120 Argumentation and Debate

TOTAL UNITS FOR THE MAJOR 18
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.

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**

54 total hours lecture
3 Units
ADVISORY: ENGL-090 or eligibility for ENGL-100

A survey of mass communication in the information age. This course examines the origins, development, role and impact of the major mass media in society — books, newspapers, magazines, radio, television, film, recordings, web — as well as the Internet’s 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)

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4G

**JOURN-110 Writing for the Media**

36 total hours composition, 54 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-100

This course provides an introduction into collecting, evaluating and writing information and news for print, Internet and broadcast media audiences. It also addresses issues of law and ethics pertinent to the media industries. May not be repeated. (C-ID JOUR 110)

LMC: ADR: Arts and Humanities; DA
TRANSFER: CSU

**JOURN-115A Media Writing Practicum I**

18 total hours composition
1 Unit
ADVISORY: JOURN-110

An applied course in which students practice and refine beginning news gathering, 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.

LMC: DA
TRANSFER: CSU

**JOURN-115B Media Writing Practicum II**

18 total hours composition
1 Unit
PREREQUISITE: JOURN-115A
ADVISORY: JOURN-110

An applied course in which students practice and refine intermediate news gathering, 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.

LMC: DA
TRANSFER: CSU

**JOURN-115C Media Writing Practicum III**

18 total hours composition
1 Unit
PREREQUISITE: JOURN-115B
ADVISORY: JOURN-110

An applied course in which students practice and refine intermediate news gathering, 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.

LMC: DA
TRANSFER: CSU
JOURN-129 Media Production: An Overview of Newsroom Skills and Practices
18 total hours lecture, 36 total hours lab, 72 total lab hours by arrangement
3 Units
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.
LMC: DA
TRANSFER: CSU

JOURN-130 Media Production Practicum I
18 total hours lecture, 36 total hours lab, 72 total lab hours by arrangement
3 Units
PREREQUISITE: JOURN-110 or JOURN-129
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 130)
LMC: DA
TRANSFER: CSU

JOURN-131 Media Production Practicum II
18 total hours lecture, 36 total hours lab, 72 total lab hours by arrangement
3 Units
PREREQUISITE: JOURN-130
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.
LMC: DA
TRANSFER: CSU

JOURN-132 Media Production Practicum III
18 total hours lecture, 36 total hours lab, 72 total lab hours by arrangement
3 Units
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.
LMC: DA
TRANSFER: CSU

JOURN-160 Photojournalism
36 total hours lecture, 54 total hours lab
3 Units
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)
LMC: DA
TRANSFER: UC, CSU

JOURN-161A Visual Storytelling Practicum I
12 total hours lecture, 18 total hours lab
1 Unit
ADVISORY: JOURN-110 or JOURN-160
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
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Total Hours</th>
<th>Units</th>
<th>Prerequisites/Advisory</th>
<th>Description</th>
<th>LMC</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURN-161B</td>
<td>Visual Storytelling Practicum II</td>
<td>12 total</td>
<td>1</td>
<td>PREREQUISITE: JOURN-161A</td>
<td>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.</td>
<td>DA</td>
<td>CSU</td>
</tr>
<tr>
<td>JOURN-161C</td>
<td>Visual Storytelling Practicum III</td>
<td>12 total</td>
<td>1</td>
<td>PREREQUISITE: JOURN-161B</td>
<td>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.</td>
<td>DA</td>
<td>CSU</td>
</tr>
<tr>
<td>JOURN-170</td>
<td>Occupational Work Experience Education in Journal</td>
<td>60-300</td>
<td>1-4</td>
<td>PREREQUISITE: 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 a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
<td>DA</td>
<td>CSU</td>
</tr>
<tr>
<td>JOURN-180</td>
<td>Internship in Journalism</td>
<td>60-300</td>
<td>1-4</td>
<td>PREREQUISITE: Approved online application and employer placement</td>
<td>This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student's vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.</td>
<td>DA</td>
<td>CSU</td>
</tr>
<tr>
<td>JOURN-900s</td>
<td>Selected Topics in Journalism</td>
<td>DA varies</td>
<td></td>
<td></td>
<td></td>
<td>DA</td>
<td>CSU</td>
</tr>
</tbody>
</table>
Kinesiology

DEGREE—Associate in Arts Degree for Transfer

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 earn the Associate in Arts in Kinesiology for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

Kinesiology majors have careers in:

- Sports medicine
- Cardiac rehabilitation
- Biomechanics
- Physical therapy
- Occupational therapy
- Ergonomics
- Athletic administration
- Sports broadcasting
- Exercise physiology
- Sports psychology
- Coaching
- Sports officiating

**REQUIRED CORE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-100</td>
<td>Introduction to Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOSC-040</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-045</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
</tbody>
</table>

**MOVEMENT BASED COURSES — (3 UNITS):**

<table>
<thead>
<tr>
<th>Area</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatics</td>
<td>PE-017</td>
<td>Lap Swimming</td>
</tr>
<tr>
<td>Combative</td>
<td>PE-033</td>
<td>Cardio Kickboxing</td>
</tr>
<tr>
<td>Dance</td>
<td>PE-053</td>
<td>Beginning Jazz Dance</td>
</tr>
<tr>
<td>Fitness</td>
<td>PE-004A</td>
<td>Beginning Pilates</td>
</tr>
<tr>
<td></td>
<td>PE-008</td>
<td>Weight Training</td>
</tr>
<tr>
<td></td>
<td>PE-010A</td>
<td>Beginning Circuit Training</td>
</tr>
<tr>
<td></td>
<td>PE-057</td>
<td>Yoga for Health and Fitness</td>
</tr>
</tbody>
</table>

**LIST A: SELECT TWO (2) OF THE FOLLOWING: (6-10 UNITS)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-010</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>CHEM-007</td>
<td>Intro to General, Organic and Biochemistry</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>CHEM-025</td>
<td>General College Chemistry</td>
</tr>
<tr>
<td>or</td>
<td>PHYS-015</td>
<td>Introduction to Physics</td>
</tr>
<tr>
<td>or</td>
<td>PHYS-035</td>
<td>College Physics I</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR**

24-25

**TOTAL UNITS FOR THE DEGREE**

60
Program Student Learning Outcomes

1. Demonstrate an understanding of the historical, ethical, and philosophical foundations of kinesiology.
2. Demonstrate knowledge of the relationship between physical activity and the conceptual foundations of kinesiology.
3. Identify career and/or educational options in kinesiology/physical education, and formulate an action plan to successfully pursue and attain those options.
4. Utilize critical thinking skills to identify research methods and apply them in an evaluative process to draw conclusions.

For Physical Education courses see page 217.

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
18 total hours lecture, 54 total hours lab
2 Units
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.
LMC: DA
TRANSFER: CSU

LACI-048 Leadership for Change
36 total hours lecture
2 Units
ADVISORY: Eligibility for ENGL-090
This course is an introductory class to student leadership topics and strategies for social change. This course is designed to support students in their current and future leadership roles by increasing their ability to identify challenges and issues in their organizations and world, and to work in groups to develop strategies for change and improvement. Students will engage in multiple styles of learning (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.
LMC: DA
TRANSFER: CSU
LACI-049  Social Justice Leadership Seminar
18 total hours lecture
1 Unit
ADVISORY: Eligibility for ENGL-090. This class is designed for students involved in Learning Communities (Puente, Umoja, TPLC, etc.)
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.
LMC: DA
TRANSFER: CSU

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

LACI-170  Occupational Work Experience Education in Human Services
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
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 in a formal 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.
LMC: DA
TRANSFER: CSU

LACI-170B  Cooperative Work Experience Internship in Community Service
60-450 total hours
1-8 Units
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 internships 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.
LMC: DA
TRANSFER: CSU
LACI-180  Internship in Human Services
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

LACI-900s  Selected Topics in Human Services
DA varies with course content.

Learning Skills
COURSE DESCRIPTIONS

LRNSK-040  Learning Skills Eligibility Assessment
8 total hours lecture, 5 total hours lab
.5 Unit
ADVISORY: Meet with the Disabled Students Program and/or Counselor
This course provides students with assessment for learning disabilities services eligibility. In addition to group and individual testing, students will receive instruction in study skills, academic accommodations, and learning styles. Through both assessment and class exercises, an individual learning profile including learning strengths and weaknesses and recommended compensating strategies will be developed. “An optional materials fee may be applied”. May not be repeated.
LMC: NDA

LRNSK-050  Multimodal Strategies for Reading and Spelling
54 total hours lecture, 18 total hours lab
3 Units
This course is the first in a two-semester sequence of courses and is designed for students with learning disabilities and those who need to improve their study skills in basic skills in reading, spelling, writing sentences, paragraphs. The focus is on learning strategies to develop the fundamental skills of reading and spelling. Instruction is based on a multimodal approach. May not be repeated.
LMC: NDA

LRNSK-070  Adaptive Computer Technology
36 total hours lecture, 54 total hours lab
3 Units
Computers and technology have allowed students with disabilities greater access to information and allow for increased communication. This is a beginning course that introduces students with disabilities to adaptive software and hardware. This course is appropriate for students with a basic knowledge of computers. As students progress throughout the course, they will reinforce computer skills learned and explore how the adaptive computer technology can be integrated with those skills. May not be repeated.
LMC: NDA

LRNSK-081  Learning Skills Math Reasoning and Strategies I
27 total hours lecture, 27 total hours lab
2 units
This self-paced math strategies course is designed for students with disabilities which impact math learning and retention. Each student will be assessed at the beginning of the course and will be provided...
specialized math instruction and individualized strategies based on the results of the assessment. The topics of learning styles, strategies to maximize your personal learning strengths, strategies for learning basic math concepts including whole number skills, addition, subtraction, multiplication, division, and context based arithmetic problems are covered. Students will develop individualized strategies for learning basic math concepts. Learning Skills 81 is the first of two self-paced courses designed for students with disabilities that impacts math learning. May not be repeated.

LMC: NDA

LRNSK-082 Learning Skills Math Reasoning and Strategies II
27 total hours lecture, 27 total hours lab
2 Units
ADVISORY: LRNSK-081 and/or knowledge of place value, multiplication, and division skills and strategies

This self-paced math strategies course is designed for students with disabilities which impact math learning and retention. Each student will be assessed at the beginning of the course and will be provided specialized math instruction and individualized strategies based on the results of the assessment. The topics of learning styles, strategies to maximize your personal learning strengths, strategies for learning basic math concepts including fractions, decimals, percents, estimating, and context based arithmetic problems are covered. Students will develop individualized strategies for learning basic math concepts. Learning Skills 82 is the second of two self-paced courses designed for students with disabilities which impact math learning. May not be repeated.

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.

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.
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

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.
LIBST-014 Library Research and Information Literacy Skills
18 total hours lecture
1 Unit
ADVISORY: Eligibility for ENGL-090
This course teaches the research strategies and skills for successfully locating, retrieving, evaluating, synthesizing and using information in various formats. It combines library skills, research methods and information technology literacy. Coursework includes the ethical and legal aspects of information use and the critical thinking skills necessary for successful college research. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

LIBST-017 Introduction to Internet Information Resources
13.5 total hours lecture, 13.5 total hours lab
1 Unit
ADVISORY: Eligibility ENGL-090
This introductory short term course is designed for individuals with little or no experience using the Internet. The course will provide the basic knowledge and skills needed to make effective use of information resources available via the Internet. The topics covered in course will include the nature and organization of Internet resources, options for obtaining Internet access, basic tools and strategies for locating Internet information resources, as well as evaluation criteria and documentation of Internet information. The course will be of particular value to students needing to do Internet research for course assignments. May not be repeated.
LMC: DA
TRANSFER: CSU

LIBST-018 Internet Information Resources - Advanced Search Techniques and Strategies
9 total hours lecture, 27 total hours lab
1 Unit
ADVISORY: Eligibility for ENGL-090
This short-term course is designed for individuals who may already have some experience using the Internet. The course will cover more advanced search techniques and strategies for locating information resources available on the Internet. Among the topics covered will be the use of various features of Internet web browsers such as Netscape and Internet Explorer, an in-depth comparison of Internet search engines and an exploration of sites which provide subject and discipline based information resources. This course will also cover evaluation criteria and proper documentation of Internet information sources. Students interested in learning how to more effectively and efficiently search the Internet for class assignments or topics of personal interest will find this course of particular value. May not be repeated.
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.
LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.
LIBST-170  Occupational Work Experience Education in Library Studies

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

LIBST-180  Internship in Library Studies

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

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 the 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANGT-050 Introduction to Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUS-059 Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-060 Making Effective Decisions</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-065 Mastering Management’s Essential Tools</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-070 Relating in Human Terms</td>
<td>3</td>
</tr>
<tr>
<td>MANGT-075 Managing Human Resources</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>18</td>
</tr>
</tbody>
</table>

AND SELECT A MINIMUM OF 6 UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-018 Microsoft Excel for Windows</td>
<td>3</td>
</tr>
<tr>
<td>BUS-027 Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS-035 Microsoft Office</td>
<td>3</td>
</tr>
<tr>
<td>BUS-035 A/B/C MS Word/Excel/PowerPoint (each)</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS-058 Business English</td>
<td>3</td>
</tr>
<tr>
<td>BUS-065 Word Processing with MS Word</td>
<td>3</td>
</tr>
<tr>
<td>BUS-109 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS-294 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>COMSC-040 Introduction to Computers</td>
<td>4</td>
</tr>
<tr>
<td>MANGT-170*** OWEE in Management</td>
<td>1-3</td>
</tr>
<tr>
<td>TOTAL UNITS FOR THE MAJOR</td>
<td>24</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE DEGREE | 60 |

TOTAL UNITS FOR THIS CERTIFICATE | 24 |

***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**

54 total hours lecture  
3 Units  
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.

LMC: DA  
TRANSFER: CSU

**MANGT-060 Making Effective Decisions**

54 total hours lecture  
3 Units  
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.

LMC: DA  
TRANSFER: CSU

**MANGT-065 Mastering Management’s Essential Tools**

54 total hours lecture  
3 Units  
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.

LMC: DA

**MANGT-070 Relating in Human Terms**

54 total hours lecture  
3 Units  
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.

LMC: DA  
TRANSFER: CSU

**MANGT-075 Managing Human Resources**

54 total hours lecture  
3 Units  
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.

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.

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

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

MANGT-170  Occupational Work Experience Education in Management And Supervision

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.

LMC: DA
TRANSFER: CSU

MANGT-180  Internship in Management And Supervision

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

MANGT-900s  Selected Topics in Management and Supervision

DA varies with course content.
Mathematics

DEGREE—Associate in Science for Transfer Degree

Mathematics

The Associate in Science in Mathematics for Transfer at Los Medanos College prepares students to transfer into a curriculum at a 4 year institution to pursue a baccalaureate degree in Mathematics. To achieve the degree students must:

To earn the Associate in Science in Mathematics for Transfer degree, a student must complete 60 transferable semester units that include:
1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUIRED COURSES: UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-050</td>
<td>Calculus with Analytic Geometry I</td>
<td>4</td>
</tr>
<tr>
<td>MATH-060</td>
<td>Calculus with Analytic Geometry II</td>
<td>4</td>
</tr>
<tr>
<td>MATH-070</td>
<td>Calculus with Analytic Geometry III</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

CHOOSE A MINIMUM OF 6 UNITS FROM THE LISTS BELOW, WITH AT LEAST 3 UNITS FROM LIST A

LIST A: (SELECT 1-2 COURSES)

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

LIST B: SELECT ONE COURSE (3-4 UNITS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-160</td>
<td>Discrete Math</td>
</tr>
<tr>
<td>PHYS-040</td>
<td>Physics for Scientists &amp; Engineers</td>
</tr>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
</tr>
<tr>
<td>COMSC-044</td>
<td>Intro to C++ Programming Part I</td>
</tr>
<tr>
<td>ENGIN-020</td>
<td>Programming with C++ for Engineers and Scientists</td>
</tr>
<tr>
<td>COMSC-132</td>
<td>Programming and Methodologies II</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR 18-19

TOTAL UNITS FOR THE DEGREE 60

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
36 total hours lecture, 72 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-070 or higher
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.
LMC: NDA

MATH-011 Bridge to Prealgebra
27 total hours lecture, 9 total hours lab
1.5 Units
MATH-011 is designed to support students who are enrolled in a learning community for the fall semester. Students study mathematical reasoning and problem solving strategies in an applied arithmetic context, as well as review arithmetic skills. Students learn about contributions to mathematics from multiple cultures. Methods and strategies are presented for reading math texts and taking efficient and complete notes on lectures and texts. Successful students will develop proficient arithmetic skills, strategies for problem-solving, effective learning skills, and a diverse perspective of mathematics. MATH-011 is part of the LMC Developmental Math Program. May not be repeated.
LMC: DA

MATH-012 Prealgebra
54 total hours lecture, 54 total lab hours by arrangement
4 Units
MATH-012 is a four-unit lecture/lab prealgebra course designed to provide students with the background skills and knowledge in preparation for the study of elementary algebra. In MATH-012 students will demonstrate mastery with arithmetic involving integers, signed fractions, and signed decimals, with basic proportions and percents, as well as the order of operations, exponents and solving linear equations. Students will become proficient in the application and use of calculators, estimation, arithmetic, proportional reasoning and percents, as well as multi-pronged representations including use of equations, tables, and graphs. Applications will include introductory topics from algebra, geometry, and descriptive statistics. Students will develop proficient skills in communication of mathematics, problem solving, use of multiple representations, and effective learning skills (such as self-assessment, goal-setting, and using resources). May not be repeated.
LMC: NDA

MATH-025 Elementary Algebra
72 total hours lecture, 36 total hours lab, 18 total lab hours by arrangement
5 Units
PREREQUISITE: One year high school algebra, MATH-012 with a grade of "C" or better, or completion of coursework at another college that is comparable to Math 12 with a grade of "C" or better, or demonstration of equivalent algebra 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.
LMC: DA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours</th>
<th>Lab Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-026</td>
<td>Plane Geometry</td>
<td>54</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: One year high school algebra, or MATH-025 with a grade of &quot;C&quot; or better, or MATH-029 with a grade of &quot;C&quot; or better, or completion of coursework at another college that is comparable to Math 25 with a grade of &quot;C&quot; or better, or demonstration of equivalent algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH-027</td>
<td>Pre-Statistics</td>
<td>72</td>
<td>36</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>This is an intensive course that prepares students for transfer-level Statistics through a series of projects and collaborative activities. Topics include working with numerical information (fractions, decimals, percentages), evaluating expressions related to statistical formulas, graphical and numerical descriptive statistics for quantitative and categorical data, including two-way tables and linear regression, and an introduction to the normal distribution. There is a focus on reading, writing, and critical thinking skills needed for college statistics. This course is appropriate for students who do not plan to major in math, science, computer science, business, technology, engineering, and calculus intense fields in the social sciences. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH-028</td>
<td>Math Support for Statistics</td>
<td>36</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: one year high school algebra, or MATH-025 or higher or demonstration of equivalent elementary algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math Support for Statistics is for students concurrently enrolled in Math 34. In Math Support for Statistics, students will review algebraic, geometric, and arithmetic procedures and concepts that underlie statistical formulas and concepts, do hands-on activities that promote a deeper understanding of statistical ideas, and practice reading skills and other study skills that promote success in Math 34. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH-029</td>
<td>Accelerated Elementary &amp; Intermediate Algebra</td>
<td>126</td>
<td>36</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: One year high school algebra or completion of Math 12 with a grade of &quot;C&quot; or better, or completion of coursework at another college that is comparable to Math 12 with a grade of &quot;C&quot; or better, or demonstration of equivalent prealgebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Math 29 is an accelerated Elementary and Intermediate Algebra equivalent to both Math 25 and Math 30. 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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MATH-030  Intermediate Algebra  
72 total hours lecture, 36 total lab hours by arrangement  
4 Units  
PREREQUISITE: MATH-025 with a grade of "C" or better, or completion of coursework at another college that is comparable to MATH-025 with a grade of "C" or better, or demonstration of equivalent elementary algebra skills based on our LMC assessment process, or equivalent assessment recommendation from another college, or successful completion of high school Algebra II.  
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.  
LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA

MATH-034  Introduction to Statistics  
72 total hours lecture, 36 total hours lab  
4 Units  
PREREQUISITE: MATH-027, MATH-028, MATH-029, MATH-030 or equivalent  
CO-REQUISITE: MATH-028 (If none of the above pre-requisites have been met)  
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.  
LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A

MATH-035  Finite Mathematics  
54 total hours lecture, 36 total lab hours by arrangement  
3 Units  
PREREQUISITE: MATH-029, 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.  
LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-037  Applied Calculus  
72 total hours lecture, 36 total lab hours by arrangement  
4 Units  
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.  
LMC: ADR: Language and Rationality: Communication and Analytical Thinking; DA  
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2A

MATH-040  Precalculus  
72 total hours lecture, 36 total lab hours by arrangement  
4 Units  
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/composition, 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.  
LMC: ADR: 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  
72 total hours lecture, 36 total lab hours by arrangement  
4 Units  
PREREQUISITE: MATH-026 and 040 or equivalent  
MATH-050 is an introduction to differential and integral calculus and coordinate geometry. Topics include: functions, limits, and continuity; techniques and applications of differentiation; an introduction to integration; the Fundamental Theorem of Calculus. This course is intended for students in mathematics, science and engineering majors. Use of a mathematical software package or graphing calculator is required. May not be repeated. (C-ID MATH 210)  
LMC: ADR: 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
72 total hours lecture, 36 total lab hours by arrangement
4 Units
PREREQUISITE: MATH-050 or equivalent
This course is the second of the three semester calculus sequence. The
course extends the ideas of the previous course to further develop-
ment 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 se-
quences 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.
LMC: ADR: 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
72 total hours lecture, 36 total hours lab
4 Units
PREREQUISITE: MATH-060 or equivalent
Math 70 is an extension of differential and integral calculus and coordi-
inate 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 vari-
ous 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.
LMC: ADR: Language and Rationality: Communication and
Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-075  Linear Algebra
54 total hours lecture, 36 total lab hours by arrangement
3 Units
PREREQUISITE: MATH-060 or equivalent
ADVISORY: Eligibility for ENGL-090
This course develops the techniques and theory needed to solve and
classify systems of linear equations. Solution techniques include row
operations, Gaussian elimination, and matrix algebra. Investigates the
properties of vectors in two and three dimensions, leading to the
notion of an abstract vector space. Vector space and matrix theory are
presented including topics such as inner products, norms, orthogonal-
ity, eigenvalues, eigenspaces, and linear transformations. Selected
applications of linear algebra are included. May not be repeated. (C-ID
MATH 250)
LMC: ADR: Language and Rationality: Communication and
Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-080  Differential Equations
54 total hours lecture, 36 total lab hours by arrangement
3 Units
PREREQUISITE: MATH-060 or equivalent
ADVISORY: Eligibility for ENGL-090
A study of various methods for solution of ordinary differential equa-
tions 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. May not be repeated. (C-ID
MATH 240)
LMC: ADR: 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. Mini-
 mum 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.

MATH-120  Number Systems
72 total hours lecture, 36 total lab hours by arrangement
4 Units
PREREQUISITE: MATH-029; MATH-030 or equivalent
(formerly MATH-032) MATH-120 is designed for prospective mul-
tiple subjects credential candidates. Emphasis is on understanding
concepts and operations with whole numbers, fractions, and deci-
mals through multiple representations. Problem solving strategies,
numeration systems, and elementary number theory are emphasized
in relevant contexts. Common Core math standards are also studied.
May not be repeated.
LMC: ADR: Language and Rationality: Communication and
Analytical Thinking; DA
TRANSFER: UC, CSU Gen. Ed. Area B4

MATH-060  Calculus and Analytic Geometry II
72 total hours lecture, 36 total lab hours by arrangement
4 Units
PREREQUISITE: MATH-050 or equivalent
This course is the second of the three semester calculus sequence. The
course extends the ideas of the previous course to further develop-
ment 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 se-
quences 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.
LMC: ADR: 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
72 total hours lecture, 36 total hours lab
4 Units
PREREQUISITE: MATH-060 or equivalent
Math 70 is an extension of differential and integral calculus and coordi-
inate 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 vari-
ous 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.
LMC: ADR: Language and Rationality: Communication and
Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2

MATH-075  Linear Algebra
54 total hours lecture, 36 total lab hours by arrangement
3 Units
PREREQUISITE: MATH-060 or equivalent
ADVISORY: Eligibility for ENGL-090
This course develops the techniques and theory needed to solve and
classify systems of linear equations. Solution techniques include row
operations, Gaussian elimination, and matrix algebra. Investigates the
properties of vectors in two and three dimensions, leading to the
notion of an abstract vector space. Vector space and matrix theory are
presented including topics such as inner products, norms, orthogonal-
ity, eigenvalues, eigenspaces, and linear transformations. Selected
applications of linear algebra are included. May not be repeated. (C-ID
MATH 250)
LMC: ADR: Language and Rationality: Communication and
Analytical Thinking; DA
TRANSFER: UC; CSU Gen. Ed. Area B4; IGETC Area 2
MATH-160  Discrete Math
72 total hours lecture, 36 total hours lab
4 Units
**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 COMP 152)
**LMC:** ADR: Language and Rationality: Communication and Analytical Thinking; DA
**TRANSFER:** UC; CSU Gen. Ed. Area C4; IGETC Area 2A

MATH-900s  Selected Topics in Mathematics
DA varies with course content.

MUSIC

**DEGREE--Associate in Arts for Transfer Degree**
Music

**DEGREE--Associate of Arts**
Music

**CERTIFICATES OF ACHIEVEMENT--Music**
Commercial – Business Management
Commercial – Performance
Commercial – Pedagogy

**ASSOCIATE IN ARTS**
**MUSIC FOR TRANSFER DEGREE**
The Associate in Arts degree in Music in Transfer (AAT) at Los Medanos College offers students the opportunity to acquire the basic skills and music education needed as preparation for careers in music and further study to complete a Bachelor of Arts degree in music. The AAT Arts degree in Music meets lower division standards and requirements for transfer to CSU and various other colleges, universities and music conservatories that offer the Bachelor of Arts degree in music. This program is design for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not a particular campus or major.

To earn the Associate in Arts in Music for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.

**MAJOR REQUIREMENTS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-015</td>
<td>Basic Music</td>
</tr>
<tr>
<td>MUSIC-016</td>
<td>Music Theory I</td>
</tr>
<tr>
<td>MUSIC-017</td>
<td>Music Theory II: Tonal Harmony</td>
</tr>
<tr>
<td>MUSIC-018</td>
<td>Music Theory III: Chromatic Harmony</td>
</tr>
<tr>
<td>MUSIC-013</td>
<td>Musicianship I</td>
</tr>
<tr>
<td>MUSIC-014</td>
<td>Musicianship II</td>
</tr>
<tr>
<td>MUSIC-008</td>
<td>Private Lessons Practicum (0.5)</td>
</tr>
</tbody>
</table>

PLUS AT LEAST 4 UNITS FROM:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-020</td>
<td>Baroque Ensemble (1)</td>
</tr>
<tr>
<td>MUSIC-052</td>
<td>Chamber Ensembles: Emphasis Strings (1)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR:** 24
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.)

ASSOCIATE OF ARTS
MUSIC
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: UNITS
MUSIC-005 or 6 Recital Class (2 semesters) 2
MUSIC-013 Musicianship I 2
MUSIC-014 Musicianship II 2
MUSIC-015 Basic Music (or pass theory placement exam) 3
MUSIC-016 Fundamentals of Music Theory 3
MUSIC-017 Harmony 4
MUSIC-018 Advanced Harmony 4
MUSIC-031 Piano I 1.5
MUSIC-032 Piano II 1.5
MUSIC-033A/B Intermediate/Advanced Piano 1.5
MUSIC-033A Advanced Piano 1.5
MUSIC-033B Advanced Piano 1.5
MUSIC-081 Introduction to Improvisation 1.5

TOTAL UNITS 21.5-24.5

Music Major Ensemble Requirements
AND SELECT A MINIMUM OF SIX ENSEMBLES/COURSES FROM:

MUSIC-040 Concert Band 2
MUSIC-020 Baroque Ensemble 1
MUSIC-050 Chamber Ensemble: Brass and Percussion
MUSIC-052 Chamber Ensemble: Strings 1
MUSIC-054 Chamber Ensemble: Woodwind, Vocal and Piano 1.5

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 Advanced Guitar 1.5
MUSIC-037 Advanced Piano 1.5

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

<table>
<thead>
<tr>
<th>REQUIRED COURSES:</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-186 Principles of Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS-027 Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS-294 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-012 Popular Music in American Culture</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-013 Musicianship I</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-015 Basic Music (or pass theory placement exam)</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC-028 Songwriting I</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC-030 Basic Keyboard Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>MUSIC-081 Introduction to Improvisation</td>
<td>1.5</td>
</tr>
<tr>
<td>or MUSIC-082 Intermediate Improvisation Jazz Workshop</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-089 Music and Recording Industry Business</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC-093 Studio Music Production I</td>
<td>2</td>
</tr>
<tr>
<td>RA-010 Introduction to Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>RA-021 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:

| MUSIC-034 Jazz/Rock Keyboard | 1.5 |
| MUSIC-065 Class Voice         | 1   |
| MUSIC-067 Jazz and Popular Vocal Technique | 1   |
| or Two additional group performance-oriented courses in addition to those completed for the core requirement, 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.

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)**
27 total hours lab .5 Unit
ADVISORY: Eligibility for ENGL-090; Concurrent enrollment in any music performance course.

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.

LMC: DA
TRANSFER: CSU

**MUSIC-002 Music Studio 2 (Tone / Technique)**
27 total hours lab .5 Unit
ADVISORY: MUSIC-001; eligibility for ENGL-090; Concurrent enrollment in any music performance course.

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 technique beyond the work done in MUSIC-001. The material is designed to be used individually or in any sequence. May not be repeated.

LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
<th>Lab</th>
<th>Lecture</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-003</td>
<td>Music Studio 3 (Dynamics / Balance)</td>
<td>27</td>
<td>.5</td>
<td>54</td>
<td></td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: MUSIC-002; eligibility for ENGL-090; Concurrent enrollment in any music performance course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC-005</td>
<td>Recital Class</td>
<td>54</td>
<td>1</td>
<td></td>
<td></td>
<td>CSU</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: MUSIC-008; or arrangement with a private music instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC-006</td>
<td>Sophomore Recital Preparation</td>
<td>54</td>
<td>1</td>
<td>.5</td>
<td></td>
<td>UC, CSU</td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: MUSIC-005 and placement audition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: MUSIC-008; or arrangement for lessons with a private music instructor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC-008</td>
<td>Applied Music</td>
<td>27</td>
<td>.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: Audition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Prior or concurrent enrollment in Music 5, 6, or in major performance medium; Music 30, 31,32, 33a or 33b; music theory course at appropriate level (Music 15, 16, 17, 18 or 81); and chamber ensembles (Music 50, 52 or 54). Pianists, vocalists, and guitarists may substitute alternative music courses to satisfy chamber ensemble requirement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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. It is strongly recommended that the student be concurrently enrolled in Piano (30, 31 or 32), Recital Class (5 or 6), 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, 52 or 54). May be repeated three times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC-010</td>
<td>Music Literature</td>
<td>54</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This is an interdisciplinary course providing an overview of the creative process with a focus on music. The course develops an aural analysis of music from many cultures and from past to present-day forms of musical creativity; it examines music as a reflection of the beliefs, social conditions and temper of the times. Sophistication in listening will be developed with attention to musical design, forms, style, instrumentation, and the derivation of increased pleasure from this art form. The course will allow the opportunity for creative problem-solving through critical skills thought attendance at and evaluation of contemporary exhibits and performances. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: ADR: Arts and Humanities; DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC-012</td>
<td>Popular Music in American Culture</td>
<td>54</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Eligibility for ENGL-100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A multicultural study of the evolution of America musical styles, including blues, salsa, samba, rock, jazz, pop, rhythm and blues and country and folk music, with emphasis on the African American, Euro American, Latin American origins of these contemporary styles and their historical contexts. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: ADR: Arts and Humanities; DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX 1: Program Requirements, Courses and Learning Outcomes

www.losmedanos.edu
MUSIC-013 Musicianship I
27 total hours lecture, 36 total lab hours by arrangement
2 Units
ADVISORY: MUSIC-030, MUSIC-015; 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.
LMC: DA
TRANSFER: UC, CSU

MUSIC-014 Musicianship II
27 total hours lecture, 36 total lab hours by arrangement
2 Units
ADVISORY: MUSIC-030, MUSIC-015, MUSIC-016
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. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-015 Basic Music
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100; prior or concurrent enrollment in MUSIC-030
This course is an introduction to music reading, functional keyboard, music theory and harmony and includes application of music theory and harmony to basic music compositions. Students will apply music theory and harmony across various styles of music, various cultures and various disciplines. Recommended for students who are not music majors or minors, or for students who are music majors needing reinforcement in basic musical concepts. The need to take this course is dependent upon theory placement exam. May not be repeated.
LMC: ADR: 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
54 total hours lecture
3 Units
ADVISORY: MUSIC-015 and MUSIC-030; prior or concurrent enrollment in MUSIC-013, 031 or 032
MUSIC-016 is the study of musical notation, scales, keys, intervals, rhythm, musical structure, transposition and harmonization. This course is required for music majors. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-017 Music Theory II: Tonal Harmony
54 total hours lecture, 54 total hours lab
4 Units
ADVISORY: MUSIC-016, 031 and 013; prior or concurrent enrollment in MUSIC-014, 032 or 033A
MUSIC-017 is the study of common practice harmony. The focus is on tonal harmony including the realization of figured bass lines, harmonization of melodies and the harmonic and structural analysis of examples of Baroque, Classical and Romantic musical literature. First and second species counterpoint will be introduced. This course is required for music majors and should be taken concurrently with MUSIC-014. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C1; IGETC Area 3A

MUSIC-018 Music Theory III: Chromatic Harmony and Later Styles
54 total hours lecture, 54 total hours lab
4 Units
ADVISORY: MUSIC-017, 032, 014; prior or concurrent enrollment in MUSIC-033A or 033B
MUSIC-018 is the study common practice chromatic harmony as well as styles of the 20th and 21st centuries. Elements of modal and tonal counterpoint will also be covered. Activities will include the realization of chromatic and modulating figured bass lines, harmonization of melodies and the harmonic and structural analysis of examples primarily of Romantic musical literature. The later part of the semester will be devoted to analysis and imitation exercises of Impressionism, Twelve Tone and other 20th and 21st century styles. May not be repeated.
(C-ID MUS 150)
LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>HOURS</th>
<th>UNITS</th>
<th>ADVISORY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC-020</td>
<td>Baroque Ensemble</td>
<td>54 total hours lab</td>
<td>1 Unit</td>
<td>ADVISORY: Fundamental skill on a string instrument or wind instrument is recommended</td>
<td>Students play in baroque ensembles of varying size and configuration to develop 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, Handel, Telemann and Vivaldi. There will be several public performances. May be repeated three times. (C-ID MUS 180)</td>
</tr>
<tr>
<td>MUSIC-030</td>
<td>Basic Keyboard Skills</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: Any piano class</td>
<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 aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-030A</td>
<td>Continuing Piano Workshop</td>
<td>24 total hours lab</td>
<td>.5 Unit</td>
<td>ADVISORY: Any piano class</td>
<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 aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-031</td>
<td>Piano I</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: Ability to read music at elementary level</td>
<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 aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-032</td>
<td>Piano II</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: MUSIC-031 or equivalent</td>
<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 aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-033A</td>
<td>Intermediate Piano</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: MUSIC-033A or placement audition</td>
<td>Intermediate piano study with an emphasis on historic and stylistic interpretation, preparation, and performance of advanced level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-033B</td>
<td>Advanced Piano</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: MUSIC-033B or placement audition</td>
<td>Advanced piano study with an emphasis on historic and stylistic interpretation, preparation, and performance of advanced level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspects of piano playing. May not be repeated.</td>
</tr>
<tr>
<td>MUSIC-034</td>
<td>Jazz/Rock Keyboard</td>
<td>18 total hours lecture, 36 total hours lab</td>
<td>1.5 Units</td>
<td>ADVISORY: Some basic piano experience</td>
<td>Piano study with an emphasis on Historic and stylistic interpretation, preparation, and performance of advanced level keyboard literature from all historical periods. Ensemble and accompaniment skills will be covered as well as keyboard theory and technical aspects of piano playing. May not be repeated.</td>
</tr>
</tbody>
</table>
MUSIC-035  Introduction to the Guitar
18 total hours lecture, 36 total hours lab
1.5 Units
This course is designed for the student with little or no background in playing the guitar. Course content covers basic guitar strums, chords, tuning, and song accompaniments. Students must supply their own guitar. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-036  Intermediate Guitar
18 total hours lecture, 36 total hours lab
1.5 Units
ADVISORY: MUSIC-035
Continuing the content of MUSIC-035, students will study with an emphasis on stylistic interpretation, preparation and performance of intermediate level guitar literature from a variety of historical periods and styles. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-037  Advanced Guitar
18 total hours lecture, 36 total hours lab
1.5 Units
ADVISORY: MUSIC-036
Continuing the content of MUSIC-036, students will study with an emphasis on stylistic interpretation, preparation and performance of advanced level guitar literature from a variety of historical periods and styles. Both ensemble and solo playing will be investigated along with technique and music theory. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-040  Concert Band
108 total hours lab by arrangement
2 Units
PREREQUISITE: Fundamental skill on a band instrument; assessed by audition
ADVISORY: Eligibility for ENGL-090
Introduction to collegiate level concert band, involving basic studies in musical interpretation, advanced performance concepts, critical sight reading, and extended technical exercises, extensive practice and frequent public performance. May be repeated three times.
(C-ID MUS 180)
LMC: DA
TRANSFER: UC, CSU

MUSIC-050  Chamber Ensembles : Emphasis - Brass and Percussion
90 total hours lab
1.5 Units
In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western art music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May be repeated three times.
LMC: DA
TRANSFER: UC, CSU

MUSIC-052  Chamber Ensembles: Emphasis Strings
54 total hours lab
1 Unit
In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western art music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

MUSIC-054  Chamber Ensembles: Emphasis - Woodwind, Vocal and Piano
90 total hours lab
1.5 Units
In this course students play in small ensembles of varying size and configuration with intensive work in ensemble skills such as pitch matching, tone blending, and rhythmic synchronization. Studies in musical interpretation, advanced performance concepts, and critical sight reading are applied to repertoire which may be drawn from every style of Western art music from the Renaissance to the present. There will be several public performances. Fundamental skill on your instrument is required. May be repeated three times.
LMC: DA
TRANSFER: UC, CSU
**MUSIC-060  College Chorus I**

108 total hours lab  
2 Units  
ADVISORY: Eligibility for ENGL-090

This class investigates basic choral group fundamentals. Development of basic vocal techniques through large group activities; extensive practice and frequent public performances. May be repeated 3 times.

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-065  Class Voice**

54 total hours lab  
1 Unit  
ADVISORY: Eligibility for ENGL-090

This course is an investigation of vocal techniques such as breathing, dictation, vowel production, and tone quality; care of the voice; music reading and vocal interpretation. Singing and basic repertoire include an introductory to foreign language diction and pronunciation. This is a multilevel 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.

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-066  Gospel Choir**

90 total hours lab  
1.5 Units  
ADVISORY: Eligibility for ENGL-090

The Gospel Choir will offer an introductory experience in the dynamics of performing choral literature from the gospel music tradition. The emphasis of this course will be on developing an understanding and skill in complex rhythm structure, phrasing and vocal production and intonation needed for singing Gospel Music. May be repeated three times.

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-067  Jazz and Vocal Popular Techniques**

54 total hours lab  
1 Unit  
ADVISORY: Eligibility for ENGL-090

This course is designed for anyone who wants to learn more about singing popular forms of music such as blues, jazz, gospel and musical theatre selections. Classroom emphasis will be on various stylistic concepts to achieve the modern vocal sound. May not be repeated.

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-070  Jazz Ensemble styles of Duke Ellington and Miles Davis**

108 total hours lab  
2 Units  
ADVISORY: 3 or more years rehearsing/performing in a jazz big band on a jazz band instrument

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Duke Ellington and Miles Davis. There are several public performances per semester. May not be repeated. (C-ID MUS 180)

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-071  Large Jazz Ensemble styles of Count Basie and John Coltrane**

108 total hours lab  
2 Units  
ADVISORY: 3 or more years rehearsing/performing in a jazz big band on a jazz band instrument

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Count Basie and John Coltrane. There are several public performances per semester. May not be repeated. (C-ID MUS 180)

LMC: DA  
TRANSFER: UC, CSU

**MUSIC-072  Large Jazz Ensemble styles of Gil Evans and Dizzy Gillespie**

108 total hours lab  
2 Units  
ADVISORY: 3 or more years rehearsing/performing in a jazz big band on a jazz band instrument

A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Gil Evans and Dizzy Gillespie. There are several public performances per semester. May not be repeated. (C-ID MUS 180)

LMC: DA  
TRANSFER: UC, CSU
### MUSIC-073 Large Jazz Ensemble styles of Thad Jones and Maria Schneider
- **108 total hours lab**
- **2 Units**
- **ADVISORY:** 3 or more years rehearsing/performing in a jazz big band on a jazz band instrument
- A course for student musicians with some experience playing in a large jazz ensemble wishing to investigate diverse material in the jazz canon in the styles of Thad Jones and Maria Schneider. There are several public performances per semester. May not be repeated. (C-ID MUS 180)
- LMC: DA
- TRANSFER: CSU

### MUSIC-074 Jazz Studio - from Basie through Coltrane
- **108 total hours lab**
- **2 Units**
- **ADVISORY:** Fundamental skill on a jazz band instrument and placement audition by professor
- A course for student musicians of basic to intermediate level. Student musician must have fundamental skill on a jazz band instrument playing in a large jazz ensemble. For the student musician wishing to investigate basic jazz band material in the jazz canon in the styles of Duke Ellington, Count Basie, Charlie Parker, Miles Davis, Thad Jones, Slide Hampton and John Coltrane. There are several public performances per semester. May be repeated three times. (C-ID MUS 180)
- LMC: DA
- TRANSFER: UC, CSU

### MUSIC-077 Chamber Chorale
- **108 total hours lab**
- **2 Units**
- This course is designed to give students experience in chamber choir music from madrigal style to earlier classical styles. The course will develop singing techniques to aid students in performing with proper historical, technical, and stylistic aspects. Frequent public performances included. May be repeated three times.
- LMC: DA
- TRANSFER: UC, CSU

### MUSIC-081 Introduction to Improvisation
- **90 total hours lab**
- **1.5 Units**
- **ADVISORY:** MUSIC-015 or MUSIC-015 placement exam
- This course is designed to introduce the student to various techniques for improvisation. Included in this will be the improvised and aural traditions comprising the bulk of the music of the Western and non-Western world. The stylistic areas covered will include jazz, funk, blues, rock, African and approaches to improvising. May not be repeated.
- LMC: DA
- TRANSFER: UC, CSU

### MUSIC-082 Intermediate Improvisation Jazz Workshop
- **108 total hours lab**
- **2 Units**
- **ADVISORY:** 3 or more years on a jazz band instrument
- A course for student musicians with some experience playing and improvising wishing to explore the many styles and varieties of small group jazz playing, from swing to bebop to modal to free to modern mainstream. There are several public performances per semester. May be repeated three times. (C-ID MUS 180)
- LMC: DA
- TRANSFER: UC, CSU

### MUSIC-089 Music and Recording Industry Business
- **36 total hours lecture**
- **2 Units**
- **ADVISORY:** Eligibility for ENGL-090
- This course is designed to familiarize the student with the primary business and legal aspects of the music/recording industry. Topics include: An overview of the music and recording industries, interrelationships among the various career specialties, career planning, business basics for music/recording entrepreneurs, the business of songwriting & composing, copyright, publishing, bands as businesses, artist representation, record labels, the recording studio from a business perspective, marketing, radio, merchandise, distribution and live performance. Meets the LMC Recording Arts Associate Degree and Certificate requirements and Music Certificate. May not be repeated.
- LMC: DA
- TRANSFER: CSU
MUSIC-091  Music Technology for Music Majors
18 total hours lecture, 72 total hours lab
2 Units
ADVISORY: Prior or concurrent enrollment in MUSIC-015
This course is a hands-on introduction to notation and sequencer programs using MIDI (Musical Instrument Digital Interface). Students will be able to produce professional looking music score and lead sheet using current music notation software, and MIDI sequences using current music sequencing software. With notation programs, students will understand the concept of notation, score layout and advanced notation techniques. Students will be able to reproduce simple songs for publication, distribution, copyright and archive. With sequencing programs, students understand the MIDI language, the basics of putting together a MIDI sequence using multiple MIDI channels and sound modules. Students will record their project unto a standard professional recording media. Students will be able to demonstrate how synthesizers, computers and electronic musical devices are connected. Students will learn to use MIDI studio equipment’s (synthesizers, computers, drum machines, effects, modules, multitrack recorders) for musical compositions and performance. May not be repeated.
LMC: DA
TRANSFER: CSU

MUSIC-093  Studio Music Production I
18 total hours lecture, 72 total hours lab
2 Units
ADVISORY: Prior or concurrent enrollment in MUSIC-015
This course is for students wanting to produce music using professional music studio equipment. With this lecture/demonstration and hands on class, students will be able to build a music studio and learn the basic operation of electronic musical equipment. The pieces of electronic musical equipment include MIDi synthesizers, 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.
LMC: DA
TRANSFER: CSU

MUSIC-094  Studio Music Production II
18 total hours lecture, 72 total hours lab
2 Units
ADVISORY: MUSIC-015; concurrent enrollment in MUSIC-016 or MUSIC-028
For students wanting to be music studio producers. Students will be able to learn various roles of music production. Music roles to be explored include the artist, producer, manager, business manager, agent, and songwriter. Discussion will include issues regarding management contracts, partnership/band contracts, agency contracts. Business entities will be explored. Students will learn to compose an intermediate-level original musical work using electronic musical equipment. May not be repeated.
LMC: DA
TRANSFER: CSU

MUSIC-095  Studio Music Production III
18 total hours lecture, 72 total hours lab
2 Units
ADVISORY: MUSIC-015; concurrent or prior enrollment in MUSIC-016 or MUSIC-028
Students will be able to learn various styles of music production in depth. Music styles to be explored include rap, jazz, classical, rock, metal, popular, R&B, and new styles as they emerge. With this lecture/demonstration and hands-on class, students will also be able to learn advanced level operation of electronic musical equipment. The pieces of electronic musical equipment include Midi synthesizers, music workstations, Digital Audio workstations, samplers, groove boxes, drum machines, soft-synthesizers, sequencers, and new products as the industry advances. This is an advanced level course and it is intended to further improve upon the strong foundation in understanding studio music production. Students will also learn to mix and master a final musical product using a digital audio workstation and learn about the distribution channels of music. May not be repeated.
LMC: DA
TRANSFER: CSU

MUSIC-098  Independent Study in Music
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.
MUSIC-250 Night Jazz Band
90 total hours lab
1.5 Units

ADVISORY: Advanced mastery of instrument(s) commonly used in a large jazz ensemble, including mastery of sight reading and soloing

A course for musicians wishing to investigate challenging professional level material in the jazz canon in the styles of Duke Ellington, Don Redman, Dizzy Gillespie, Joe Henderson, Charles Mingus, Kenny Wheeler and John Fedchock. There are frequent public performances. May be repeated three times. (C-ID MUS 180)

LMC: DA
TRANSFER: UC, CSU

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>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL-100 College Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH-029 Accelerated Elementary &amp; Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or MATH-030 Intermediate Algebra</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-040 Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-045 Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-050 Intro to Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH-010 or 11 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>24-27</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED BY THE BOARD OF REGISTERED NURSING</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCH-110 Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td><strong>27-30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADVISORY COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS-001 Nursing Career Seminar</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Registered Nursing Curriculum

**REQUISITED COURSES: FIRST SEMESTER**
- RNURS-022 Foundations of Nursing Practice 9.5
- RNURS-023 Nursing Skills Simulation I 1
- RNURS-024 Pharmacology for RN Program I 1

**REQUISITED COURSES: SECOND SEMESTER**
- RNURS-026 Nursing in Health and Illness I 9.5
- RNURS-027 Nursing Skills Simulation II 1
- RNURS-028 Pharmacology for RN Program II 1

**REQUISITED COURSES: THIRD SEMESTER**
- RNURS-031 Nursing in Health & Illness II 9.5
- RNURS-033 Nursing Skills Simulation III 1
- RNURS-034 Pharmacology for RN Program III 1

**REQUISITED COURSES: FOURTH SEMESTER**
- RNURS-030 Leadership/Management/Professionalism 1
- RNURS-036 Nursing in Health & Illness III 9.5
- RNURS-038 Nursing Skills Simulation IV 1
- RNURS-039 Pharmacology for RN Program IV 1

**TOTAL UNITS 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

**REQUISITED COURSES: PREREQUISITES**
- ENGL-100 College Composition 3
- MATH-030 Intermediate Algebra 4
- BIOSC-040 Human Anatomy 5
- BIOSC-045 Human Physiology 5
- BIOSC-050 Intro to Microbiology 4
- PSYCH-010 or 11 General Psychology 3

**TOTAL UNITS**: 24

**REQUISITED COURSES: GRADUATION REQUIREMENTS**
- SPCH-110 Oral Communication 3

**TOTAL UNITS**: 6

**Vocational Nursing**
The Vocational Nursing Program is three semesters in length. The Certificate of Achievement is awarded upon successful completion of the program. Completion of prerequisite courses and required GPA are required for admission eligibility to the program. Only those students formally admitted to the program may enroll in vocational nursing courses.

Completion of the vocational nursing program qualifies students to take the State Board Examination (NCLEX-PN) for licensure as a vocational nurse (LVN).
# CERTIFICATE OF ACHIEVEMENT

## VOCATIONAL NURSING

### RECOMMENDED COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNURS-001</td>
<td>Nursing Careers Seminar</td>
<td>0.3</td>
</tr>
</tbody>
</table>

### REQUIRED COURSES: PREREQUISITES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-030</td>
<td>Introduction to Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOSC-040</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>BIOSC-045</td>
<td>Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>MATH-025 or higher *</td>
<td>Elementary Algebra</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>COMSC-040</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td>COMSC-049**</td>
<td>1.5</td>
</tr>
<tr>
<td>ENGL-095</td>
<td>Accelerated Reading, Writing, &amp; Critical Thinking</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td>ENGL-100***</td>
<td>3</td>
</tr>
<tr>
<td>NUTRI-055</td>
<td>Introduction to Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>VONUR-008</td>
<td>Medical Terminology for Healthcare Occupations</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td>BUS-086</td>
<td>3</td>
</tr>
</tbody>
</table>

*If you plan to receive an Associate Degree or to eventually qualify to apply for the Associate Degree Registered Nursing Program, it will be necessary for you to satisfactorily complete *Math 30 or higher, or pass a proficiency exam.

** Beginning in Fall 2017 CHEM-007 (4 units) is a prerequisite for the Vocational Nursing Program.

COMSC-049 will no longer be a prerequisite for the Fall 2017 application period.

***Beginning in Fall 2016 English 90 will no longer be a pre-requisite and is replaced by English 95. English 95 is an accelerated course that will meet the prerequisite for English 100.

### REQUIRED COURSES: FIRST SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR-004</td>
<td>Introduction to Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR-005</td>
<td>Fundamentals of Vocational Nursing</td>
<td>6</td>
</tr>
<tr>
<td>VONUR-006</td>
<td>Fundamentals of Vocational Nursing Practice</td>
<td>6</td>
</tr>
<tr>
<td>VONUR-007</td>
<td>Vocational Nursing Role Relationships</td>
<td>1</td>
</tr>
</tbody>
</table>

### REQUIRED COURSES: SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR-010</td>
<td>Intermediate Core Concepts in Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR-011</td>
<td>Medical Surgical Nursing</td>
<td>5</td>
</tr>
<tr>
<td>VONUR-012</td>
<td>Medical Surgical Nursing Practice</td>
<td>6</td>
</tr>
</tbody>
</table>

### REQUIRED COURSES: THIRD SEMESTER

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR-015</td>
<td>Advanced Core Concepts in Clinical Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>VONUR-016</td>
<td>Family Centered Nursing</td>
<td>5</td>
</tr>
<tr>
<td>VONUR-017</td>
<td>Family Centered Nursing Practice</td>
<td>6</td>
</tr>
<tr>
<td>VONUR-018</td>
<td>Professional Issues in Vocational Nursing</td>
<td>1</td>
</tr>
</tbody>
</table>

**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.
Nursing - Registered

COURSE DESCRIPTIONS

RNURS-001 Nursing Career Seminar
6 total hours lecture
.3 Unit

This seminar introduces students to the nursing profession and discusses current trends related to the profession. Emphasis is placed on introducing the student to the professional standards of practice of the registered nurse and the licensed vocational nurse. The student is provided with an overview of the course requirements needed to qualify for the Los Medanos nursing programs. May not be repeated.

LMC: NDA

RNURS-020 Transition to the RN Program
6 total hours lecture
.3 Unit

PREREQUISITE: Accepted to the Registered Nursing Transition Program

This RN transition course is required of nursing students who meet the admission criteria to be accepted into the third semester of the Registered Nursing program as Licensed Vocational Nurses (LVN) or as transfer students. Emphasis is on Nursing Process, the RN scope of practice, the Registered Nursing program curriculum plan and expectations, competency in drug dosage calculations, and use of campus resources. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-022 Fundamentals of Nursing Practice
72 total hours lecture, 297 total hours lab
9.5 Units

PREREQUISITE: Must be admitted to the Registered Nursing Program

CO-REQUISITE: Concurrent enrollment in RNURS-023 and 024

Concepts that provide the foundation upon which homeostasis is maintained in adults and/or children are covered. Common threads integrated throughout the program are nursing process, nutrition, developmental levels, cultural diversity, therapeutic communication, and the professional role of the registered nurse. Concurrent practice in the nursing laboratory and in clinical facilities in the community is included. Mandatory fees associated with this course may include: $90-$150 for background check and drug screening; $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; $35-$75 for CPR Certification; $250 for physical exam, lab fees, and immunizations. Fees are subject to changed. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-023 Nursing Skills Simulation I
54 total hours lab
1 Unit

PREREQUISITE: Must be admitted to the Registered Nursing Program

CO-REQUISITE: RNURS-022 and 024

This course includes instructor demonstration and student return demonstration of nursing skills related to Foundations of Nursing Practice. The simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. Basic calculation of drug dosages is also initiated. Mandatory fees for the course include: $60-$150 for Lab Kit. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-024 Pharmacology for the RN Program I
18 total hours lecture
1 Unit

PREREQUISITE: Must be admitted to the Registered Nursing Program

CO-REQUISITE: Concurrent enrollment in RNURS-022 and 023

This course is designed to introduce beginning nursing students to their role and responsibilities in the safe administration of medications in the clinical setting. Basic principles of medication administration such as the Six Rights (right patient, right drug, right dose, right time, right route, right documentation). Pharmacodynamics of drug absorption, metabolism and distribution through various routes along with other basic principles of pharmacology are introduced. May not be repeated.

LMC: DA
TRANSFER: CSU
RNURS-026  Nursing in Health and Illness I
72 total hours lecture, 297 total hours lab
9.5 Units
PREREQUISITE: Must have been admitted to the Registered Nursing Program; RNURS-022, 023 and 024 or equivalent
CO-REQUISITE: Concurrent enrollment in RNURS-027 and 028

This course expands upon the concepts presented in RNURS-022 Fundamentals of Nursing Practice. 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 is included. Mandatory fees associated with this course include: $90-$150 for background check and drug screening; 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; $55-$75 for CPR Certification; $250 for physical exam, lab fees, and immunizations. Fees are subject to changed. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-027  Nursing Skills Simulation II
54 total hours lab
1 Unit
PREREQUISITE: Admission to the Registered Nursing program and RNURS-022, 023, & 024 or equivalent
CO-REQUISITE: RNURS-026 and RNURS-028

This course includes professor demonstration and student return demonstration of higher level nursing concepts related to diabetic medical-surgical nursing care, parenteral medication administration, nasogastric tube placement and care, ostomy care, maternity, and newborn nursing care. Simulation of patient care situations provide for development of proficiency in preparation for actual patient care in the clinical setting. 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
18 total hours lecture
1 Unit
PREREQUISITE: Admitted to the Registered Nursing program; RNURS-022, 023 and 024 or equivalent
CO-REQUISITE: Concurrently enrolled in RNURS-026 and 027

This second semester of pharmacology expands upon the principles and drug administration techniques introduced in the first semester. Specific drug classifications covered include oral contraceptives, tocolytics, uterine stimulants, newborn medications, anesthetics, antibiotics, diuretics, Insulin, oral hypoglycemics, anti-anginals, antihypertensives, prescriptives for the gastro-intestinal system and prescriptive used to improve respiratory function. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-030  Leadership/Management and Professionalism in Nursing
18 total hours lecture
1 Unit
PREREQUISITE: Must have been admitted to the Registered Nursing Program
CO-REQUISITE: Concurrent enrollment in RNURS-036, 038 and 039

This course introduces the students to the professional role of the registered nurse in the healthcare setting. Topics covered include, but are not limited to, nursing practice and the law, ethics and ethical principles; dealing with problems and conflicts; organizational structures in healthcare; delegation of client care; scope of practice and management of client care. Leadership and management principles are applied to the health care field. May not be repeated.

LMC: DA
TRANSFER: CSU

RNURS-031  Nursing in Health and Illness II
72 total hours lecture, 297 total hours lab
9.5 Units
PREREQUISITE: Must have been admitted to the Registered Nursing Program; RNURS-026, 027, and 028 or equivalent
CO-REQUISITE: Concurrent enrollment in RNURS-033 and 034

Expands upon 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: $90-$150 for background check and drug screening (for advance placement students only); $20-$25 for Health Stream 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-$75 for CPR Certification; $250 for physical exam, lab fees, and immunizations. Fees are subject to changed. May not be repeated.

LMC: DA
TRANSFER: CSU
RNURS-033  Nursing Skills Simulation III
54 total hours lab
1 Unit
PREREQUISITE: Admission to the Registered Nursing program and RNURS-026, 027, & 028 or equivalent
CO-REQUISITE: RNURS-031 and RNURS-034
This course includes professor demonstration and student return demonstration of higher level nursing concepts related to suctioning and tracheostomy care, chest tube management, IV management, epidural and patient controlled analgesia, and laboratory values. The simulation of client care situations provide for development of proficiency in preparation for actual client care in the clinical setting. Drug dosage calculations are continued with introduction of IV calculations. Mandatory fees associated with this course include: $60-$150 for Skills Lab Kit per year. May not be repeated.
LMC: DA
TRANSFER: CSU

RNURS-034  Pharmacology for RN Program III
18 total hours lecture
1 Unit
PREREQUISITE: Must have been admitted to the Registered Nursing Program; RNURS-026, 027, and 028 or equivalent
CO-REQUISITE: Concurrent enrollment in RNURS-031 and 033
Third semester of pharmacology principles expands upon the principles and drug administration techniques introduced in the previous two semesters. Specific drug classifications covered include but are not limited to Cardiac Glycosides, Anticoagulants, Antifungal, Antiviral, Pain, Anti-Diabetic Medications. May not be repeated.
LMC: DA
TRANSFER: CSU

RNURS-036  Nursing in Health and Illness III
72 total hours lecture, 297 total hours lab
9.5 Units
PREREQUISITE: Must have been admitted to the Registered Nursing program; RNURS-031, 033, and 034 or equivalent
CO-REQUISITE: 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; $90-$150 for background check and drug screening; $40-$65 for mandatory standardize testing. Fees are subject to change. May not be repeated.
LMC: DA
TRANSFER: CSU

RNURS-038  Nursing Skills Simulation IV
54 total hours lab
1 Unit
PREREQUISITE: Must have been admitted to the Registered Nursing program and have completed RNURS-031, 033, & 034 or equivalent
CO-REQUISITE: RNURS-036 and 039
Instructor demonstration and student return demonstration of higher level nursing concepts including but not limited to organ donation, blood transfusions, blood draws, central lines, cardiac arrest and rhythm strip interpretation. Simulation of patient care situations with traditional manikins as well as hi-fidelity manikins provide for development of proficiency in preparation for actual patient care in the clinical setting. Drug dosage calculations are continued to maintain proficiency. Mandatory fees associated with this course include: For Advanced Placement/Transfer Students ONLY: $60-$150 for skills lab kit per year. May not be repeated.
LMC: DA
TRANSFER: CSU

RNURS-039  Pharmacology for RN Program IV
18 total hours lecture
1 Unit
PREREQUISITE: Must have been admitted to the Registered Nursing program; RNURS-031, 033 and 034 or equivalent
CO-REQUISITE: Concurrent enrollment in RNURS-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.
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.

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

RNURS-170  Occupational Work Experience Education in Registered Nursing
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.

LMC: DA
TRANSFER: CSU

RNURS-180  Internship in Registered Nursing
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.

LMC: DA
TRANSFER: CSU

RNURS-900s  Selected Topics in Registered Nursing
DA varies with course content.
Nursing - Vocational

**COURSE DESCRIPTIONS**

**VONUR-004 Introductory Concepts to Clinical Pharmacology**
- 18 total hours lecture
- 1 Unit

**PREREQUISITE:** Admission to the Vocational Nursing Program

**CO-REQUISITE:** Concurrent enrollment in VONUR-005, 006, and 007

This course will present introductory core concepts of pharmacology including drug regulations, pharmacokinetic actions of drugs, effects of medications on older adults and drug dosage calculations. May not be repeated.

**LMC:** DA

**VONUR-005 Fundamentals of Vocational Nursing**
- 108 total hours lecture
- 6 Units

**PREREQUISITE:** Admission to the Vocational Nursing Program

**CO-REQUISITE:** Concurrent enrollment in VONUR-004, 006, and 007

This course provides fundamental instruction on the basic nursing skills that are necessary to create and maintain a hygienic, comfortable and safe patient environment. This course incorporates the concepts of homeostasis, the nursing process, maintaining an optimum level of wellness and care mapping as the foundations for providing safe and comprehensive nursing care. May not be repeated.

**LMC:** DA

**VONUR-006 Fundamentals of Vocational Nursing**
- 342 total hours lab
- 6 Units

**PREREQUISITE:** Admission to the Vocational Nursing Program

**CO-REQUISITE:** Concurrent enrollment in VONUR-004, 005, and 007

Supervised clinical instruction in the implementation of basic fundamental nursing skills introduced in VONUR 005. Concurrent supervised practice in college lab with collaborative peer study groups and instructor. Mandatory fees associated with the course include: $90-$150 for background check and drug screening; $20-$25 for Health Stream Orientation; $20-$45 for mask fit testing; $60-$150 for skills lab kit; $250 for uniform/shoes/lab coat; $15-$150 for stethoscope; $40-$60 for parking at clinical sites; $55-$75 for CPR Certification; $250 for physical exam, lab fees, and immunizations; $150-$200 standardized testing; $20 bandage scissors and pen light. Fees are subject to changed. May not be repeated.

**LMC:** DA

**VONUR-007 Vocational Nursing Role Relationships**
- 18 total hours lecture
- 1 Unit

**PREREQUISITE:** Admission to the Vocational Nursing Program

**CO-REQUISITE:** Concurrent enrollment in VONUR-004, 005, and 006

This course introduces the student to role relationships, and the ethical and legal responsibilities of the student nurse. Students will also explore the evolution of the vocational nursing practice and roles. May not be repeated.

**LMC:** DA

**VONUR-008 Medical Terminology for Healthcare Occupations**
- 18 total hours lecture
- 1 Unit

**ADVISORY:** Eligibility for ENGL-090

This course provides an integrated approach to learning and using medical terminology for the person interested in becoming a healthcare professional or one who works in a healthcare occupation. May not be repeated.

**LMC:** DA

**VONUR-010 Intermediate Concepts to Clinical Pharmacology**
- 18 total hours lecture
- 1 Unit

**PREREQUISITE:** Admission to the Vocational Nursing Program.

**CO-REQUISITE:** Concurrent enrollment in VONUR-011 and 012

This intermediate course presents concepts of clinical pharmacology and drug therapy used in the management of major diseases and disorders affecting the neurological, muscular, respiratory, cardiovascular, gastrointestinal, endocrine, and genitourinary body systems in the adult client. The pharmacology content also includes nursing care of clients, prescribed antibiotics, anti-infectives, cancer medications, and pre and post operative drug therapy of the surgical adult client. May not be repeated.

**LMC:** DA
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>VONUR-011</td>
<td>Medical Surgical Nursing</td>
<td>90 total</td>
<td>Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-005; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-010, 012</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VONUR-012</td>
<td>Medical-Surgical Nursing Practice</td>
<td>342 total</td>
<td>Lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-006; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-010 and 011</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VONUR-015</td>
<td>Advanced Concepts to Clinical Pharmacology</td>
<td>18 total</td>
<td>Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-010; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-016, 017, and 018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VONUR-016</td>
<td>Family Centered Nursing</td>
<td>90 total</td>
<td>Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-011; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-015, 017, and 018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduces the concept of family-centered nursing practice. Instruction includes principles of nursing to maintain and/or restore homeostasis in clients with common disease conditions and health needs seen in pregnancy, infancy, childhood, and the adult client with psychiatric disorders. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VONUR-017</td>
<td>Family Centered Nursing Practice</td>
<td>342 total</td>
<td>Lab</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 Units</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-012; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-015, 016, and 018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family-centered clinical practice of the family including pregnancy, infancy, childhood, and the adult psychiatric client. Concurrent supervised practice in college lab with collaborative peer study groups and instructor. Mandatory fees associated with the course include: $40-$60 for parking at clinical sites; $250 for licensure; $20-$25 for Health Stream Orientation. Fees are subject to changed. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VONUR-018</td>
<td>Professional Issues in Vocational Nursing</td>
<td>18 total</td>
<td>Lecture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PREREQUISITE: VONUR-007; Admission to the Vocational Nursing Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO-REQUISITE: Concurrent enrollment in VONUR-015, 016, and 017</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduces the student to the roles, responsibilities, legal and ethical changes in society affecting nursing practice and nursing employment. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**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.

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

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

**VONUR-170  Occupational Work Experience Education in Vocational Nursing**

60-300 total hours
1-4 Units

**PREREQUISITE:** Approved online application

**ADVISORY:** Eligibility for ENGL-090

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

**LMC:** DA

**TRANSFER:** CSU

**VONUR-180  Internship in Vocational Nursing**

60-300 total hours
1-4 Units

**PREREQUISITE:** Approved online application and employer placement

**ADVISORY:** Eligibility for ENGL-090

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

**LMC:** DA

**TRANSFER:** CSU

**VONUR-900s  Selected Topics in Vocational Nursing**

DA varies with course content.
Nutrition

COURSE DESCRIPTIONS

NUTRI-055 Introduction to Nutrition
54 total hours lecture
3 Units

ADVISORY: ENGL-090

A study of the basic principles to be utilized for personal and family needs. Topics covered include the significance of food in 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 over nutrition and under nutrition; and sources of valid nutrition information. May not be repeated.

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.

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
54 total hours lecture
3 Units

PREREQUISITE: ENGL-100

This course is an introduction to ethics that focuses on classical ethical theories and their application to selected contemporary ethical issues such as environmental protection, reproductive rights, genetic engineering, and globalization. May not be repeated.

LMC: ADR: 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
54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

Same as POLSC-033. An introduction to the history & development of a 2,500 year old tradition of political thought & statecraft. Originating in a condition of Athenian democratic dysfunction, this tradition has intermittently reanimated itself with the concern to understand the fragility of Republican-Democratic political systems. While a comparative attempt to study certain non-democratic ideas & practices will be made, the primary goal of this course is to introduce students to the difficulties inherent in sustaining any viable democratic regime, including, notably, the American system of which they are a living part. The course will proceed with an interdisciplinary, cross-cultural & comparative approach which is compatible with the discursive, interpretive nature of the study of primary texts & their authors in historical context. POLSC/PHIL-033 meets Social and Behavioral Sciences and Art and Humanities requirements. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2, D; IGETC Area 3B, 4H
PHIL-040  Introduction to Philosophy
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course introduces the student to philosophy in both the Western and nonwestern traditions. The Western tradition covers the philosophers of ancient Greece, focusing on Socrates, Plato and Aristotle, to the present. Later topics include the tension between faith and reason during the Middle Ages, The Age of Reason, focusing on concern for epistemology and political order, and, finally, the romantic reaction and its concern for the existential needs of the individual. Existentialist philosophy will serve as a bridge to the spiritual pathways described in the philosophies of the East, namely Buddhism, Taoism, and Hinduism. The search for spiritual meaning is demonstrated in Native American and other shamanic systems as well. This course provides foundation for specialized study within the field of philosophy, and for understanding the origin of seminal ideas that anchor related fields of study, such as political science, psychology and physics, and finally, encourages the use of philosophical ideas for the purpose of self-discovery. May not be repeated.

LMC: ADR: Arts and Humanities; DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B

PHIL-041  Critical Thinking
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
The purpose of this critical thinking course is to develop skills for constructing sound arguments and evaluating the arguments of others. It provides a sensitivity to the formal components in language and to the requirements of clear and effective communication. Attending to the flaws and fallacies of persuasive arguments, critical thinking provides a defense against irrationality, prejudice, and deceptions, large and small. Utilizing methods of self-reflection the student learns to view his relationship to the world within a broad unifying perspective. May not be repeated.

LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area A3

PHIL-042  Comparative Religion
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
Comparison of the world’s religions in terms of the way they conceptualize and relate to a supernatural order. Comparisons are drawn from Christianity, Judaism, Islam, Hinduism, Buddhism, mystical and shamanistic traditions. Each is shown to provide for the organization of a social world as well as a means of personal transcendence. May not be repeated.

LMC: ADR: 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.

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

PHIL-900s  Selected Topics in Philosophy
DA varies with course content.
Physical Education

COURSE DESCRIPTIONS

**PE-002 Beginning Step Aerobics**
54 total hours activity
1 Unit

This class is an introduction to step aerobics, designed especially for beginning students, but open to those with experience. This is a high energy, low impact class that will provide a complete cardiovascular fitness workout including warm-up, cool-down and stretching exercises. Basic step principles as well as circuit and interval training will be used to improve and maintain cardio fitness levels. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

**PE-004A Beginning Pilates**
54 total hours activity
1 Unit

(formerly PE-004) This class will teach basic mat Pilates exercises as 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. Students will learn to develop their own fitness program utilizing mat exercises and basic fitness equipment to meet personal goals for lifelong fitness. May not be repeated.

LMC: DA
TRANSFER: CSU

**PE-004B Intermediate Pilates**
54 total hours activity
1 Unit

**ADVISORY: PE-004A**

This class will teach intermediate mat Pilates exercises as developed by Joseph Pilates, and blend other fitness modes for a cross training experience. There will be an emphasis placed on safety precautions, technique and methodology, and its application to lifelong fitness. This class will also teach intermediate physical fitness principles and their application to total health and fitness. Students will learn to develop their own personalized fitness program utilizing intermediate mat exercises and basic fitness equipment to meet their personal goals for lifelong fitness. May not be repeated.

LMC: DA
TRANSFER: CSU

**PE-004C Advanced Pilates**
54 total hours activity
1 Unit

**ADVISORY: PE-004B**

This class will teach Advanced Mat Pilates exercises as developed by Joseph Pilates, and blend other fitness modes for a cross training experience. There will be an emphasis placed on safety precautions, technique and methodology, and its application to lifelong fitness. This class will also teach Advanced physical fitness principles and their application to total health and fitness. Students will learn to develop their own personalized fitness program utilizing intermediate mat exercises and basic fitness equipment to meet their personal goals for lifelong fitness. May not be repeated.

LMC: DA
TRANSFER: CSU

**PE-006 Physical Fitness**
54 total hours activity
1 Unit

Physical fitness is an aerobic workout designed to improve cardiovascular endurance, muscular endurance, flexibility and strength. Students will learn dynamic stretch and warm up routines, proper body mechanics when using weight exercise machines and free weights. Cardiovascular training may include walking, jogging, cycling, step, circuit and interval training. Students will learn how to attain, monitor and control their target heart rate during exercise. This course helps attain and maintain wellness. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

**PE-008 Weight Training**
54 total hours activity
1 Unit

This course includes instruction in all elements of weight training. It will involve techniques, safety procedures, knowledge of muscle groups, equipment use, warm-up, strength and endurance training, exercise progression and improved fitness. May not be repeated.

LMC: DA
TRANSFER: UC, CSU
PE-010A  Beginning Circuit Training
54 total hours activity
1 Unit
(Formerly PE-010) Beginning Circuit Training is an exercise program designed to improve both cardiovascular strength/endurance, and muscular strength/endurance. The class will be taught utilizing weight equipment, medicine balls, stability balls, ropes, stationary bikes and steps. Students will learn about the different aspects of a total fitness program, target heart rates, dynamic warm-up/stretching, proper body mechanics and the major muscle groups required to perform safe and effective exercises. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

PE-010B  Intermediate Circuit Training
54 total hours activity
1 Unit
Intermediate Circuit Training is an exercise program designed to improve both cardiovascular strength/endurance, and muscular strength/endurance. The class will be taught utilizing weight equipment, medicine balls, stability balls, ropes, stationary bikes and steps. Students will learn about the different aspects of a total fitness program, target heart rates, dynamic warm-up/stretching, proper body mechanics and the major muscle groups required to perform safe and effective exercises. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

PE-011  Bootcamp
54 total hours activity
1 Unit
This class 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.

LMC: DA
TRANSFER: UC, CSU

PE-012  Power Walk, Stretch and Tone
54 total hours activity
1 Unit
A cardiovascular exercise class intended to provide a complete fitness program without impact. The class is designed for all levels of fitness regardless of age or ability. The level of activity is based on individual needs. An emphasis will be placed on lifelong fitness and developing flexibility, cardiovascular fitness, muscular toning and weight control. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

PE-014  Volleyball
54 total hours activity
1 Unit
This course provides students with instruction in the fundamentals of volleyball including serving, blocking, digging, setting and spiking. Emphasis will be placed on knowledge of rules and team strategy. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

PE-016  Beginning Swimming
54 total hours activity
1 Unit
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.

LMC: DA
TRANSFER: UC, CSU

PE-017  Lap Swimming
54 total hours activity
1 Unit
Lap swimming provides students with the opportunity to complete distance workouts, build cardiovascular endurance, work on stroke technique and learn proper lane etiquette. May not be repeated.

LMC: DA
TRANSFER: UC, CSU

PE-018  Water Fitness
54 total hours activity
1 Unit
This class will utilize the basic principles of buoyancy and resistance in water to improve overall fitness levels. Included will be strength, flexibility and cardiovascular exercises. This class will also teach basic physical fitness principles for lifelong fitness. May not be repeated.

LMC: DA
TRANSFER: UC, CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE-020</td>
<td>Exerjazz for Fitness</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 appropriate for the student with little experience in rhythmic exercise of dance. May not be repeated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-026A</td>
<td>Beginning Soccer</td>
<td>1</td>
<td>(formerly PE-026) Beginning Soccer is a course designed to provide students with instruction in the fundamental skills of soccer including passing, dribbling, shooting, and trapping the ball. Students will learn the proper form and technique for each of these skills by participating in soccer specific drills as well as in short sided scrimmages. In addition, students will learn the rules of the game, and will learn how to properly warm up and cool down before and after playing soccer in order to reduce the risk of injury. May not be repeated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-030</td>
<td>Tennis</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-033</td>
<td>Cardio Kickboxing</td>
<td>1</td>
<td>Cardio kickboxing will combine punches, kicks, sports conditioning, and drills to provide a workout that will improve cardiovascular fitness, muscular strength and flexibility. This course designed for all fitness levels. May not be repeated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-042</td>
<td>Golf</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-046</td>
<td>Basketball</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-049</td>
<td>Total Body Sculpting</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-053</td>
<td>Beginning Jazz Dance</td>
<td>1</td>
<td>This course teaches students basic dance technique and choreography to enhance strength, flexibility and form. May not be repeated. Designed for the student with little experience in ballet or jazz dance,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>PE-054</td>
<td>Intermediate Jazz Dance</td>
<td>1</td>
<td>This course teaches students intermediate dance technique and choreography. May not be repeated. Designed for the student with training in Ballet or Jazz, Modern, Afro, Hip-Hop, or trend styles of dance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>LMC: DA                                                                Languages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TRANSFER: UC, CSU</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Total Hours Activity</td>
<td>Units</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>PE-055</td>
<td>Advanced Jazz Dance</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Beginning/Intermediate Jazz Dance is recommended</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-056</td>
<td>Dance Production Workshop</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Students should have taken classes in jazz dance, ballet, modern or hip hop dance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dance production workshop provides an opportunity for the student that has taken jazz dance, ballet, modern, 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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057A</td>
<td>Beginning Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(formerly PE-057) This course introduces the student to beginning yoga poses to enhance strength, flexibility, muscle control, mental concentration, and alertness. Beginning breathing and relaxation techniques will help the student reduce stress and tension. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057B</td>
<td>Intermediate Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: PE-057A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course introduces the student to intermediate yoga poses to enhance strength, flexibility, muscle control, mental concentration, and alertness. Intermediate breathing and relaxation techniques will help the student reduce stress and tension. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057C</td>
<td>Advanced Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: PE-057B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course introduces the student to advanced yoga poses and flow sequencing to enhance strength, flexibility, muscle control, mental concentration, and alertness. Advanced breathing and relaxation techniques will help the student reduce stress and tension. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-059</td>
<td>Flow Yoga</td>
<td>108</td>
<td>2</td>
</tr>
<tr>
<td></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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-067</td>
<td>Introduction to Sports Medicine &amp; Athletic Training</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: BIOSC-030 or equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This class is an introduction to the growing field of athletic training and sports medicine. Topics to be covered include basic anatomy, athletic injury terminology, recognition and evaluation of injuries, first-aid and emergency procedures, reconditioning, and protective taping and wrapping techniques. This is designed for the prospective coach, athletic trainer, physical therapist, and health and physical educator. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-056</td>
<td>Advanced Jazz Dance</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Beginning/Intermediate Jazz Dance is recommended</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-056</td>
<td>Dance Production Workshop</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: Students should have taken classes in jazz dance, ballet, modern or hip hop dance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dance production workshop provides an opportunity for the student that has taken jazz dance, ballet, modern, 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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057A</td>
<td>Beginning Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(formerly PE-057) This course introduces the student to beginning yoga poses to enhance strength, flexibility, muscle control, mental concentration, and alertness. Beginning breathing and relaxation techniques will help the student reduce stress and tension. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE-057B</td>
<td>Intermediate Yoga for Health and Fitness</td>
<td>54</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>ADVISORY: PE-057A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course introduces the student to intermediate yoga poses to enhance strength, flexibility, muscle control, mental concentration, and alertness. Intermediate breathing and relaxation techniques will help the student reduce stress and tension. May not be repeated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LMC: DA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PE-098  Independent Study in Physical Education

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

PE-100  Introduction to Kinesiology

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-090

This is an introductory course that will survey the discipline of kinesiology/physical education including the analysis of the nature and importance of physical activity, the knowledge base of the discipline and careers in physical activity professions. Focus will also be placed on the integrative nature of the discipline. May not be repeated. (C-ID KIN 100)

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

PE-105  CPR/First Aid

54 total hours lecture
3 Units

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 administer 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.

LMC: DA
TRANSFER: UC, CSU

PE-170  Occupational Work Experience Education in Physical Education

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

PE-180  Internship in Physical Education

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application and employer placement

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

PE-900s  Selected Topics in Physical Education

DA varies with course content.
Program Requirements, Courses and Learning Outcomes

Physical Science

COURSE DESCRIPTIONS

PHYSC-005 General Physical Science
54 total hours lecture, 18 total hours lab
3 Units
ADVISORY: Eligibility for ENGL-100

This is an introduction to the major disciplines of physical science; physics, chemistry, earth science, and astronomy. Overarching ideas of disciplines will be emphasized, including energy and its transformations, the periodic table, plate tectonics, and the life cycles of stars. Critical thinking, relationships between the disciplines, and applications to everyday life are also emphasized. May not be repeated.

LMC: ADR: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B1; IGETC Area 5A

PHYSC-098 Independent Study in Physical Science
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

PHYSC-900s Selected Topics in Physical Science
DA varies with course content.

Physics

DEGREE—Associate in Science for Transfer in 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 earn the Associate in Science in Physics for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<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>
</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
54 total hours lecture, 54 total hours lab
4 Units
PREREQUISITE: MATH-029, 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 interdisciplinary 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.
LMC: ADR: Natural Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

PHYS-035 College Physics I
54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: MATH-040 or equivalent
ADVISORY: PHYS-015
This course is an integrated study of the basic concepts, principles, and laws underlying physical phenomena and processes. Energy will be the unifying theme in treating mechanics, thermodynamics, and oscillations. This is the first semester of a year long course in general college physics. May not be repeated. (C-ID PHYS 105)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

PHYS-036 College Physics II
54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: PHYS-035 or equivalent
This course is a continuation of PHYS-035, covering the areas of electricity and magnetism, geometrical and physical optics, fluids, sound, quantum physics, relativity, and nuclear physics. May not be repeated. (C-ID PHYS 110)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

PHYS-037 General College Physics Calculus Supplement I
9 total hours lecture
.5 Unit
CO-REQUISITE: PHYS-035; MATH-037 or MATH-050
This course, taken with PHYS-035, is equivalent to a calculus-based physics course. Students learn how to solve calculus-based physics problems in mechanics and thermodynamics, such as center of mass, moments of inertia, and the work done by a gas undergoing various types of expansion. Students will also learn how to convert from approximate, non-calculus formulas to the exact, calculus-based formulas. May not be repeated.
LMC: DA
TRANSFER: CSU, UC

PHYS-038 General College Physics Calculus Supplement II
9 total hours lecture
.5 Unit
CO-REQUISITE: PHYS-036, MATH-060
This course, taken with PHYS-036, is equivalent to a calculus-based physics course. Students learn how to solve calculus-based physics problems in fluid dynamics, wave phenomena, electromagnetism, and modern physics, such as atmospheric pressure variations, determining the electric field and voltage around a particular charge distribution, or determining radiation exposure. Students will also learn how to convert from approximate, non-calculus formulas to the exact, calculus-based formulas. May not be repeated.
LMC: DA
TRANSFER: CSU, UC

PHYS-040 Physics for Scientists and Engineers I
54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: Prior or concurrent enrollment in MATH-060
This is an introduction to Newtonian mechanics. Topics will include vectors, rectilinear and planar motion, Newton’s Laws, work and energy, linear and angular momentum, rotational kinematics and dynamics, equilibrium, oscillations, and gravitation. May not be repeated. (C-ID PHYS 205)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C
PHYS-041 Physics for Scientists and Engineers II
54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: PHYS-040 and prior or concurrent enrollment in MATH-070
This course is an introduction to electricity and magnetism. Topics will include Coulomb’s Law, Gauss’ Law, electric fields, electric potential, Ohm’s Law, DC circuits, Capacitance, magnetic fields, Faraday’s Law, electric oscillations, electromagnetic waves, Maxwell’s equations and AC circuits. May not be repeated. (C-ID PHYS 210)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

PHYS-042 Physics for Scientists and Engineers III
54 total hours lecture, 72 total hours lab
4 Units
PREREQUISITE: PHYS-040 and prior or concurrent enrollment in MATH-070
This course is an introduction to fluids, waves, sound, heat and thermodynamics, geometrical and physical optics and quantum physics. May not be repeated. (C-ID PHYS 215)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area B1, B3; IGETC Area 5A, 5C

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.
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.

Political Science

COURSE DESCRIPTIONS

POLSC-010 Introduction to American Government: Institutions and Ideals
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
A comprehensive introduction to the issues, institutions and ideals of American government, with special emphasis on the constitutions of the United States and the State of California. The historic development of national, state and local government since the eighteenth century will be emphasized. Special attention will be paid to the rights and obligations of citizenship and our heritage of social and ethnic diversity. The completion of Political Science POLSC-010 partially satisfies the American History and Institutions CSU transfer requirement. May not be repeated. (C-ID POLS 110)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4H

POLSC-020 Introduction to Politics: Institutions and Ideals
54 total hours lecture
3 Units
ADVISORY: ENGL-100
A comprehensive introduction to the issues, institutions and ideals of modern politics, with emphasis on the constitutional systems of the United States and the State of California. This course offers a thorough, fundamental survey of the basic methods, concepts and theories of political science, and the ways in which they can foster a deeper understanding of our local, national and global communities. Special attention will be paid to the rights and obligations of citizenship and the political effects of social diversity. The completion of POLSC-020 partially satisfies the U.S. History, Constitution and American Ideals CSU requirements. May not be repeated.
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4H

PHYS-900s Selected Topics in Physics
DA varies with course content.
POLSC-033  A History of Political Thought: The Problem Of Democracy

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

Same as PHIL-033. An introduction to the history & development of a 2,500 year old tradition of political thought & state craft. 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-033 meets Social and Behavioral Sciences requirement. May not be repeated.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area C2, D; IGETC Area 3B, 4A

POLSC-040  Introduction to California State and Local Politics

54 total hours lecture
3 Units

ADVISORY: ENGL-100

This course provides an overview of California politics, focusing on the organization and operation of government at the state and local governmental levels. This examination will include a review of the historical and geographical factors that have shaped California, development as well as the analysis of the contemporary political, social, demographic, and economic issues facing the state. In addition to consideration of institutional forces at the governmental level, non-governmental entities such as interest groups, campaign professionals, and media organizations, will be prominently featured during this course. The enduring significance of specific subjects and issues in the state political process, notwithstanding the annual budget process, elections, and diversity, will necessitate reflection at specific intervals. Salient features of the overall course design and requirements are structured to achieve a balance among the normative, practical, and participatory dimensions of California politics. May not be repeated.

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

POLSC-043  International Relations

54 total hours lecture
3 Units

ADVISORY: POLSC-010 and ENGL-100

This course introduces students to the study of political, economic and cultural relations among states, international organizations and non state actors, focusing on the interdependence of nations and cultures in the modern world. The course features an interdisciplinary perspective, with contributions from geography, history, sociology and economics. Emphasis will be placed on the links between local and international communities in an era of economic and cultural globalization. This general education course satisfies LMC graduation requirements and is fully transferable to CSU and UC institutions. May not be repeated.

LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4G

POLSC-050  Introduction to Comparative Politics

54 total hours lecture
3 Units

ADVISORY: Eligibility for ENGL-100

An introduction to the fundamental concepts used by political scientists to study the political institutions and outcomes in a broad range of national settings. The course emphasizes the rich diversity of political life, alternative solutions to important social issues, the link between political processes and policy outcomes, and the impact of global economic and political change on national political systems. National case studies will include the United States, United Kingdom, Germany, Russia, China, India, Nigeria and Mexico. May not be repeated.

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

POLSC-098  Independent Study in Political Science

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

POLSC-900s  Selected Topics in Political Science

DA varies with course content.
Process Technology

DEGREE—Associate of Science
Process Technology

CERTIFICATE OF ACHIEVEMENT
Process Technology

COLLEGE SKILLS CERTIFICATE
Bridge to Advanced Manufacturing

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.

ASSOCIATE OF SCIENCE AND CERTIFICATE OF ACHIEVEMENT
PROCESS TECHNOLOGY

RECOMMENDED COURSES: PROGRAM ENTRY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-025</td>
<td></td>
</tr>
<tr>
<td>ENGL-095</td>
<td></td>
</tr>
</tbody>
</table>

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTEC-007</td>
<td></td>
</tr>
<tr>
<td>PTEC-010</td>
<td></td>
</tr>
<tr>
<td>PTEC-012</td>
<td></td>
</tr>
<tr>
<td>PTEC-024</td>
<td></td>
</tr>
<tr>
<td>PTEC-025</td>
<td></td>
</tr>
<tr>
<td>PTEC-027</td>
<td></td>
</tr>
<tr>
<td>PTEC-035</td>
<td></td>
</tr>
<tr>
<td>PTEC-044</td>
<td></td>
</tr>
<tr>
<td>PTEC-045</td>
<td></td>
</tr>
<tr>
<td>PTEC-048</td>
<td></td>
</tr>
<tr>
<td>PTEC-060</td>
<td></td>
</tr>
<tr>
<td>MATH-030</td>
<td></td>
</tr>
<tr>
<td>CHEM-006</td>
<td></td>
</tr>
<tr>
<td>CHEM-007</td>
<td></td>
</tr>
<tr>
<td>PHYS-015**</td>
<td></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.

COLLEGE SKILLS CERTIFICATES
BRIDGE TO ADVANCED MANUFACTURING

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTEC-007</td>
<td></td>
</tr>
<tr>
<td>PTEC-010</td>
<td></td>
</tr>
<tr>
<td>PTEC-012</td>
<td></td>
</tr>
<tr>
<td>MATH-025</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE: 10

Program Student Learning Outcomes

1. This certificate will provide new and returning students, including veterans, with skills necessary to succeed in obtaining a Certificate of Achievement in Process Technology.
COURSE DESCRIPTIONS

PTEC-004 Process Technology (PTEC) Career Exploration

18 total hours lecture  
1 Unit  
This career exploration course provides students with a clear overview of the everyday activities of a petrochemical process technician, also called a plant operator. The course is designed to help students decide if a career as a plant operator is right for them. The students will learn what an operator does on a day to day basis and many of the terms used by operators. The essential abilities to work well with teams of diverse people, to foster a good work attitude, and to balance work life with home life will be explored. May not be repeated.

LMC: DA  
TRANSFER: CSU

PTEC-007 Industrial Technology Career Skills

18 total hours lecture  
1 Unit  
ADVISORY: Eligibility for ENGL-090  
This highly interactive course gives students awareness and know-how to succeed in the industrial technology environment. The student will learn about personal and interpersonal interactions including self motivation, communication, teamwork, work/life balance, shift operations behavior, personal vision, confidence, initiative, attitude, personal appearance and positive behavior. The student will learn about working in the industrial technology environment and acquire these skills through a series of interactions with the instructor and other students utilizing a variety of learning media. May not be repeated.

LMC: DA  
TRANSFER: CSU

PTEC-010 Introduction to Process Technology

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100  
This introductory course will provide a clear overview of everyday life in the process technology industry. The student will learn about and experience first hand the variety of equipment used in typical processes and see how important safety and environmental considerations are in petrochemical operations. The class includes labs and field trips to typical chemical and petroleum manufacturing plants. The student is expected to climb ladders to the top of processing units, wear and carry safety equipment, and work in confined spaces. May not be repeated.

LMC: DA  
TRANSFER: CSU

PTEC-012 Petrochemical Safety, Health, and Environment

18 total hours lecture  
1 Unit  
ADVISORY: PTEC-010; eligibility for ENGL-100  
This course provides an in-depth view of how important safety and environmental considerations are in the petrochemical industry. Covers the various government regulatory groups that oversee this industry and explains why the use of planning, protection, and preventative procedures enable the petrochemical industries to provide occupations that are interesting, rewarding and safe. May not be repeated.

LMC: DA  
TRANSFER: CSU

PTEC-024 Process Instrumentation

45 total hours lecture, 27 total hours lab  
3 Units  
ADVISORY: PHYS-015, PTEC-010; eligibility for ENGL-100  
This class puts together all of the typical components of a “control loop” and explains how an instrument control system works. The student will also learn about the instruments that measure and control process variables such as pressure, temperature, and flow, and will gain an appreciation of this critical and applicable knowledge. The student will also see how instruments do most of the work in a typical petrochemical process. May not be repeated.

LMC: DA  
TRANSFER: CSU

PTEC-025 Process Technology I - Equipment

54 total hours lecture  
3 Units  
ADVISORY: PHYS-015; MATH-030; PTEC-010, 012; eligibility for ENGL-100  
The student will learn about equipment such as heat exchangers, distillation towers, reactors, valves, and pumps. Not only will you acquire essential skills that will help you pursue a career in the petrochemical industry, but the next time you drive past a chemical plant, you will be able to explain to your family or friends what is really going on. May not be repeated.

LMC: DA  
TRANSFER: CSU
PTEC-027  Applied Instrument Analysis
9 total hours lecture, 27 total hours lab
1 Unit
PREREQUISITE: CHEM-006 or CHEM-007
CO-REQUISITE: CHEM-006 or CHEM-007
ADVISORY: PTEC-010; eligibility for ENGL-100
An introduction to analytical instruments used in typical laboratories, such as gas chromatographs and chemical titrating instruments. Covers various methods of sampling and analyzing to determine the composition of typical liquids, solids, and gases used in the petrochemical industry. May not be repeated.
LMC: DA
TRANSFER: CSU

PTEC-035  Process Technology II - Systems
54 total hours lecture
3 Units
ADVISORY: PTEC-012, 025; CHEM-006 or 007; eligibility for ENGL-100
Building on the content learned in Process Technology I - Equipment (PTEC-025), this course covers the various "systems" that tie the equipment together and keep them operating. The student will learn how to interact with these systems as a technician and will learn about financial considerations which make an operation profitable. May not be repeated.
LMC: DA
TRANSFER: CSU

PTEC-044  Petrochemical Simulation Laboratory
54 total hours lab
1 Unit
PREREQUISITE: PTEC-035
ADVISORY: Eligibility for ENGL-100
This PTEC laboratory builds upon knowledge gained about equipment and systems in PTEC-025 and PTEC-035. Computer simulation software is used to learn and practice skills in operating typical petrochemical unit operations such as heat exchanger systems and distillation columns. May not be repeated.
LMC: DA

PTEC-045  Process Technology III - Operations
45 total hours lecture, 27 total hours lab
3 Units
PREREQUISITE: PTEC-035
ADVISORY: Eligibility for ENGL-100
Drawing on the knowledge and skills learned in Process Technology I (PTEC-025) and II (PTEC-035), the student gains a deeper understanding of the responsibilities of an operating technician, including the specific roles of an operating technician and how to apply operation skills to startup and shutdown. The student will also learn how to operate a petrochemical plant and respond safely in the event of an emergency. Additional skills learned are how to keep a written log of process occurrences and communicate effectively with others. May not be repeated.
LMC: DA
TRANSFER: CSU

PTEC-048  Process Troubleshooting
54 total hours lecture
3 Units
PREREQUISITE: PTEC-035; MATH-025 or MATH-029
ADVISORY: PTEC-044, 045; eligibility for ENGL-100
This PTEC class teaches problem solving, or commonly referred to in industry as troubleshooting. The student will learn and practice skills such as deductive and inductive reasoning and root cause analysis to troubleshoot real petrochemical problems and to prevent problems from occurring in the future. May not be repeated.
LMC: DA
TRANSFER: CSU

PTEC-060  Industrial Technology Career Preparation
18 total hours lecture
1 Unit
ADVISORY: Eligibility for ENGL-090
In this course, the student will learn about the phases of pre-employment including resume and application writing, pre-employment testing, and the all important interview. The student will learn about critical interviewing skills such as 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.
LMC: DA
TRANSFER: CSU
PTEC-098  Independent Study in Process Technology

Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

PTEC-170  Occupational Work Experience Education in Process Technology

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

PTEC-180  Internship in Process Technology

60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU

PTEC-900s  Selected Topics in Process Technology

DA varies with course content.
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, administrators and business consultants.

To earn the Associate in Arts in Psychology for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of "C" or better or a "P" if the course is taken on a "pass-no pass" basis.

**REQUISITE CORE COURSES:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-034 Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH-011 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-017 Introduction to Research Methods in Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST A:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOSC-010 Introduction to Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

**LIST B:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIO-015 Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**LIST C:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH-010 Individual and Social Processes</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR THE MAJOR:** 20

**TOTAL UNITS FOR THE DEGREE:** 60

---

**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

54 total hours lecture

3 Units

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.

LMC: ADR: Social and Behavioral Sciences; DA

TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4I

**PSYCH-011** General Psychology

54 total hours lecture

3 Units

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.

LMC: ADR: Social and Behavioral Sciences; DA

TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4I
PSYCH-014  Psychology of Human Sexuality
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
This class is designed to help students better understand the subject of human sexuality as it relates to sexual intimacy from both an emotional and physical point of view. The subject of sexuality will be addressed from the disciplines of psychology, sociology, biology and physiology. The practical application of the course material will have an emphasis on the cognitive /behavioral approach to intimacy. The major focus of the class will be on the topic of intimacy, which will include self, emotional and sexual. Other topics that will be examined include sexual anatomy and physiology, gender issues, sexual orientation, sexual minorities, sexual assault, domestic violence, and sexually transmitted infections. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area D, E; IGETC Area 4D, 4I

PSYCH-017  Introduction to Research Methods in Psychology
54 total hours lecture
3 Units
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)
LMC: DA
TRANSFER: UC, CSU Gen. Ed. Area D; 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.
LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.

PSYCH-170  Occupational Work Experience Education in Psychology
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation.
LMC: DA
TRANSFER: CSU

PSYCH-180  Internship in Psychology
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen field. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

PSYCH-900s  Selected Topics in Psychology
DA varies with course content.
**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.

---

### REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAL-005/*****</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>REAL-020/***</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>REAL-025/***</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS 9**

AND SELECT 18 UNITS OF ELECTIVE COURSES FROM:

<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-109</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS-181/***</td>
<td>Accounting: Applied Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS-186**</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS-294</td>
<td>Business Law*</td>
<td>3</td>
</tr>
<tr>
<td>BUS-027</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS-185</td>
<td>Computerized Assisted Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS-029</td>
<td>QuickBooks</td>
<td>2</td>
</tr>
</tbody>
</table>

**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

---

**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**

54 total hours lecture  
3 Units  
ADVISORY: Eligibility for ENGL-100

This course is designed for students preparing to enter the real estate business. It is the basic foundation course which includes an overview of real and personal property, acquisition & ownership and estates in real property. The student will be introduced to finance and appraisal concepts, learn about ethics, agency, fair housing issues and mandatory disclosures, study taxation, zoning and escrow procedures and understand the requirements needed to obtain a real estate license. May not be repeated.

LMC: DA  
TRANSFER: CSU

**REAL-020  Real Estate Practice**

54 total hours lecture  
3 Units  
ADVISORY: REAL-005; eligibility for ENGL-100

This course is designed for students preparing to enter the real estate business. It will prepare the student to select a broker-employer, develop his/her business plan, understand the importance of ethics and the fiduciary relationship, prospect for clients, show and market property and prepare listing and sales agreements. The student will also learn the mandatory disclosures, fair housing laws and government taxation of real property. The course is required by the California Department of Real Estate to obtain the 4-year salesperson’s license. May not be repeated.

LMC: DA  
TRANSFER: CSU

The Real Estate courses prepare the student to complete the California State Broker’s License Examination.
REAL-025  Real Estate Finance
54 total hours lecture
3 Units
ADVISORY: REAL-005; eligibility for ENGL-100
This course is designed for students preparing to enter or are currently employed in the real estate business and related fields. The course qualifies as one of several electives necessary to obtain the State of California salesperson’s license and is mandatory to obtain the state’s broker’s license. It is 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.
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.
LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.

REAL-170  Occupational Work Experience Education in Real Estate
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

REAL-180  Internship in Real Estate
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
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

COLLEGE SKILLS CERTIFICATE
Recording Arts Level 1
Recording Arts Level 2

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 27 units of coursework listed below as well as the General Education and requirements. 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>RA-010 Recording Arts I</td>
<td>3</td>
</tr>
<tr>
<td>RA-012 Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>RA-015 Music Fundamentals for Audio Professionals</td>
<td>3</td>
</tr>
<tr>
<td>RA-020 Recording Arts II</td>
<td>3</td>
</tr>
<tr>
<td>RA-021 The Role of the Producer</td>
<td>2</td>
</tr>
<tr>
<td>RA-025 Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>RA-030 Recording Arts III</td>
<td>3</td>
</tr>
<tr>
<td>RA-032 Recording Arts Workshop</td>
<td>(min) 1</td>
</tr>
<tr>
<td>RA-035 ProTools Production &amp; Editing</td>
<td>3</td>
</tr>
<tr>
<td>RA-040 Recording Arts IV</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS FOR THE MAJOR</td>
<td>27</td>
</tr>
</tbody>
</table>

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

Typical sequence – 4 semesters

<table>
<thead>
<tr>
<th>REQUIRED COURSES: FALL</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-010 Introduction to Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>RA-012 Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>RA-015 Music Fundamentals for Audio Professionals</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES: SPRING</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-020 Recording Arts II</td>
<td>3</td>
</tr>
<tr>
<td>RA-021 The Role of the Producer</td>
<td>(Basic Session Producing)</td>
</tr>
<tr>
<td>RA-025 Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES: FALL</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-030 Recording Arts III</td>
<td>3</td>
</tr>
<tr>
<td>RA-032 Recording Arts Workshop</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR THIS CERTIFICATE 27

Typical sequence – 3 semesters + summer

<table>
<thead>
<tr>
<th>REQUIRED COURSES: SPRING*</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-010 Introduction to Recording Arts</td>
<td>3</td>
</tr>
<tr>
<td>RA-015 Music Fundamentals for Audio Professionals</td>
<td>3</td>
</tr>
<tr>
<td>RA-021 The Role of the Producer</td>
<td>(Basic Session Producing)</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES: SUMMER</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-020 Recording Arts II</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES: FALL</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-012 Sound Reinforcement</td>
<td>3</td>
</tr>
<tr>
<td>RA-030 Recording Arts III</td>
<td>3</td>
</tr>
<tr>
<td>RA-032 Recording Arts Workshop</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REQUIRED COURSES: SPRING</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-025 Basic Tracking Sessions</td>
<td>3</td>
</tr>
<tr>
<td>RA-035 ProTools Production and Editing</td>
<td>3</td>
</tr>
<tr>
<td>RA-040 Recording Arts IV</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL UNITS</td>
<td>9</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.

**COLLEGE SKILLS CERTIFICATE**
**RECORDING ARTS LEVEL 1**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</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>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE: 14

**COLLEGE SKILLS CERTIFICATE**
**RECORDING ARTS LEVEL 2**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
<th>UNITS</th>
</tr>
</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 COLLEGE SKILLS CERTIFICATE: 13

**COURSE DESCRIPTIONS**

**RA-010 Introduction to Recording Arts**
36 total hours lecture, 72 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-090

This course is designed for the general student or the student entering the Recording Arts Program and includes an introduction to the terminology and practices within recording arts. The emphasis is on broad general concepts and practical methods. The content includes audio procedures, microphone techniques, overdubbing and basic mixing. The multi track recorder and mixing console are used for demonstration. May not be repeated.

LMC: DA
TRANSFER: CSU

**RA-012 Sound Reinforcement**
36 total hours lecture, 54 total hours lab
3 Units

ADVISORY: Eligibility for ENGL-090

This course is an overview of the field of concert sound reinforcement. This branch of audio engineering is concerned with the installation and operation of in-house and large transportable sound systems. The course provides the student with a working vocabulary and an explanation of how the many components of the sound system function and interrelate. Discussions on the acoustic environment, audio equipment, sound system setup, troubleshooting, sound check, the art of mixing sound for live performance and touring, give the student a behind-the-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.

LMC: DA
TRANSFER: CSU

**RA-015 Music Fundamentals for Audio Professionals**
54 total hours lecture
3 Units

ADVISORY: ENGL-090

This course is a basic music course addressing the specific needs of recording arts students by providing the specialized musical vocabulary and concepts needed to interact with artists in studio situations. This course also covers the basic technical aspects of music making. May not be repeated.

LMC: DA
TRANSFER: CSU

**RA-020 Recording Arts II**
36 total hours lecture, 72 total hours lab
3 Units

PREREQUISITE: RA-010

This course is the second semester course in the recording arts sequence and is designed to familiarize the student with the professional recording environment and the fundamentals of engineering. Topics include: overview of recording studio design, the recording team, detailed description of the recording chain with emphasis on LMC’s state-of-the-art recording system, system interconnection, microphones, microphone technique and mixing consoles. Meets the LMC Recording Arts Associate Degree and Certificate requirements. May not be repeated.

LMC: DA
TRANSFER: CSU
RA-021  The Role of the Producer
36 total hours lecture, 36 total hours lab
2 Units
ADVISORY: ENGL-090
This course is designed to develop strong competencies in the field of producing audio projects. The content includes detailed information on the work of producers through all three phases of production, evaluation of material, working with talent, budget analysis, legal issues, scheduling, negotiating with record labels and recording studios, managing session workflow, overseeing the mastering process and other trends in the field. May not be repeated.
LMC: DA
TRANSFER: CSU

RA-025  Basic Tracking Sessions
36 total hours lecture, 54 total hours lab
3 Units
PREREQUISITE: Prior or concurrent enrollment in RA-010
ADVISORY: ENGL-090
This course is designed for students in the early stages of the Recording Arts program. Students will receive basic training in the use of LMC's high-end recording equipment, located in Studio B, and gain hands-on experience through involvement in recording sessions. The initial focus of the course is a review of system interconnection and the primary components of the recording system. Topics include: working with clients, multi-track recording formats, the purpose of basic tracks, documentation, session setup, microphone technique, signal flow through the console and configuring the control room equipment for tracking sessions. May not be repeated.
LMC: DA
TRANSFER: CSU

RA-030  Recording Arts III
36 total hours lecture, 72 total hours lab
3 Units
PREREQUISITE: RA-020
ADVISORY: Eligibility for ENGL-090
Third semester course in the recording arts sequence. Course begins with a detailed discussion of establishing a career in the recording industry. The course includes an in-depth study of the history of recording from acoustic recording to present-day digital audio technology. The fundamentals of digital audio theory are covered. Additionally, an overview of issues related to computer-based recording systems, that includes information on configuring hardware, operating systems and application software is presented. Material related to configuring DAW hardware focuses on the Digidesign Pro Tools|HD Accel 3 digital recording system. May not be repeated.
LMC: DA
TRANSFER: CSU

RA-032  Recording Arts Workshop
54 total hours lab
1 Unit
ADVISORY: RA-010 and 020; eligibility for ENGL-090
Suggested that one is currently enrolled in second year of R.A. program. First year R.A. students should be recommended by instructor. Investigation of various selected activities associated with the recording arts program. The class will be assigned selected activities such as overdubbing, recording sessions, 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.
LMC: DA
TRANSFER: CSU

RA-033  Summer Recording Workshop
36 total hours lecture, 36 total hours lab
2.5 Units
PREREQUISITE: Prior or concurrent enrollment in RA-020
This course is designed for advanced students. Students will receive detailed training in the use of LMC’s high-end recording equipment and gain hands-on experience through involvement in recording sessions. Students will work in teams based on their skill level. The most advanced students will work on recording sessions, while other students receive further training on specific recording equipment and studio procedures. The initial focus of the course is a review of system interconnection and the primary components of the recording system. Topics include: working with clients, recording formats, documentation, session setup, microphone technique, signal flow through the console, console automation, linear and non-linear digital recording systems, analog multitrack recording with Dolby SR noise reduction, hardware and software signal processors, time code and synchronized recording systems, automated mixing, digital editing, and preparing the final product. May not be repeated.
LMC: DA
TRANSFER: CSU
RA-035 ProTools Production and Editing
54 total hours lecture
3 Units
ADVISORY: RA-010 and 020
Audio production for radio, television and compact disc release utilizing the Pro Tools systems. Required for the LMC Recording Arts Associate Degree requirements. May not be repeated.
LMC: DA
TRANSFER: CSU

RA-040 Recording Arts IV
36 total hours lecture, 72 total hours lab
3 Units
PREREQUISITE: RA-030
ADVISORY: Eligibility for ENGL-090
This is the fourth course in the recording arts sequence. This course focuses on five primary areas of study: audio post-production for film/video, signal processors, analog storage, mixing and mastering. The details of post-production audio for film are examined with an emphasis on synchronization techniques, time code and digital audio editing. An overview of signal processors is presented. Information from previous courses in the sequence is applied when studying mixing. Course concludes with a description of the mastering process. Required for the LMC Recording Arts Associated Degree and Certificate requirements. This course is offered in the spring only. May not be repeated.
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.
LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.

RA-170 Occupational Work Experience Education in Recording Arts
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation.
LMC: DA
TRANSFER: CSU

RA-180 Internship in Recording Arts
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

RA-900s Selected Topics in Recording Arts
DA varies with course content.
Sign Language

COLLEGE SKILLS CERTIFICATE
American Sign Language

COLLEGE SKILLS CERTIFICATE
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.

REQUISITE COURSES

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN-068</td>
<td>3</td>
</tr>
<tr>
<td>SIGN-072</td>
<td>3</td>
</tr>
<tr>
<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 American Sign Language in real life situations with native and non-native speakers.
2. Read and comprehend American Sign Language at levels commensurate with those of students seeking a degree in American Sign Language.
3. Differentiate the Sign Language culture, 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
90 total hours lecture
5 Units
ADVISORY: Eligibility for ENGL-090
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.
LMC: DA
TRANSFER: UC, CSU GE Area C2

SIGN-051   Elementary American Sign Language II
90 total hours lecture
5 Units
PREREQUISITE: SIGN-050 or 2 years of high school sign language or prerequisite challenge test.
Sign-051 is the continuation of Sign-050 of a four semester series of receptive and expressive skills signing 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.
LMC: DA
TRANSFER: CSU

SIGN-065   American Sign Language I
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
An intensive course designed for persons wanting to learn communication skills in American Sign Language. Emphasis is on language and cultural behavior appropriate for use in the deaf community. Note: equivalent to two years of high school Sign Language. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

SIGN-066   American Sign Language II
54 total hours lecture
3 Units
PREREQUISITE: SIGN-065
ADVISORY: Eligibility for ENGL-090
This intensive course is designed for persons wanting to learn communication skills in American Sign Language at Level II. This is a more advanced course from ASL Level I and focuses on recognizing expanding the depth of meanings of the different signs for both receptive and expressive communication. Understanding deaf culture is integrated throughout the course. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN-067</td>
<td>American Sign Language III</td>
<td>3</td>
<td>54</td>
<td>SIGN-066</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-068</td>
<td>American Sign Language IV</td>
<td>3</td>
<td>54</td>
<td>SIGN-067</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-070</td>
<td>Fingerspelling I</td>
<td>.5</td>
<td>9</td>
<td>SIGN-065 or equivalent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>This course provides an introduction to the concentrated instruction in the expressive and receptive practice of beginning fingerspelling. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-071</td>
<td>Fingerspelling II</td>
<td>.5</td>
<td>9</td>
<td>SIGN-070</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>This course is a continuation of the concentrated instruction in the expressive and receptive practice of advanced fingerspelling. May not be repeated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-072</td>
<td>Deaf Culture</td>
<td>3</td>
<td>54</td>
<td>SIGN-066 or equivalent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Advisory: Eligibility for ENGL-090</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: UC, CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-098</td>
<td>Independent Study in Sign Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIGN-900s</td>
<td>Selected Topics in Sign Language</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DA varies with course content.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Social Science

COURSE DESCRIPTIONS

SOCSC-045  Issues Facing African Americans
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
This course will examine the experience of African Americans from a socially inclusive, transcultural & interdisciplinary perspective. Students will be asked to acknowledge, properly define, & critically engage those issues and concerns most resonant, historically and currently, within ethnic memory. The ultimate goal of our study together is to gain deeper understanding of the unique heritage African Americans possess. Also to appreciate the pivotal role Blacks have played in founding and sustaining the American sense of becoming a “democratic” nation. May not be repeated.
LMC: ADR: Ethnic/Multicultural Studies; Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; 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.
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
54 total hours lecture
3 Units
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.
LMC: ADR: Ethnic/Multicultural Studies; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4D

SOCSC-136  Introduction to Gender Studies
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-100
Same as ENGL-136. Introduction to Gender Studies introduces students to foundational concepts in the field of gender studies. This course compares and contrasts sociological perspectives used to interpret gender. Through the course, students will understand key terms in gender studies, identifying differences between sex and gender and examining how these terms function within a larger social context. The course asks students to understand the main agents behind gender construction for both children and adults while identifying how these constructions operate across social and cultural institutions. Also, students will recognize the relationships between race, ethnicity, class, and sexuality as well as how power is negotiated within those relationships. Finally, students will gain a firm understanding of the social and political movements that have worked to change gender inequalities. May not be repeated.
LMC: ADR: Ethnic/Multicultural Studies; Social and Behavioral Sciences; DA
TRANSFER: CSU

SOCSC-170  Occupational Work Experience Education in Social Science
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation.
LMC: DA
TRANSFER: CSU
SOCSC-180  Internship in Social Science

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application and employer placement

ADVISORY: Eligibility for ENGL-090

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

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 earn the Associate in Arts in Sociology for Transfer degree, a student must complete 60 transferable semester units that include:

1. Complete CSU General Education- Breadth (CSU GE Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) requirements.
2. Complete the required major requirements listed below.
3. Courses for the major and the GE requirements (CSU GE-Breadth, IGETC) must be completed with a grade of “C” or better or a “P” if the course is taken on a “pass-no pass” basis.

REQUiRED COURSES:  UNiTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCIO-015</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>MATH-034</td>
<td>Introduction to Statistics</td>
<td>4</td>
</tr>
<tr>
<td>SOCIO-017</td>
<td>Introduction to Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-012</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO-016</td>
<td>Introduction to Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH-011</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR THE MAJOR: 19

TOTAL UNITS FOR THE DEGREE: 60

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
54 total hours lecture
3 Units
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.
LMC: DA
TRANSFER: UC, CSU Gen. Ed. Area E

SOCIO-015  Introduction to Sociology
54 total hours lecture
3 Units
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)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4J

SOCIO-016  Introduction to Social Problems
54 total hours lecture
3 Units
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)
LMC: ADR: Social and Behavioral Sciences; DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4J

SOCIO-017  Introduction to Research Methods
54 total hours lecture
3 Units
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. (C-ID SOCI 120)
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area D; IGETC Area 4J, 4J

SOCIO-098  Independent Study in Sociology
Provides students an opportunity to design and pursue their own interests within a particular area. Projects reflecting cultural diversity and/or societal issues will be greatly encouraged. A contract must be drawn between the student and the instructor stipulating the goals of the independent study, the content, the method of approach, the estimated time involved, and the periodic evaluation to be used. 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.

SOCIO-900s  Selected Topics in Sociology
DA varies with course content.
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. 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.

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

Program Student Learning Outcomes
1. Communicate orally and in writing in Spanish in real life situations with native and non-native speakers.
2. Read and comprehend Spanish at levels commensurate with those of students seeking a degree in Spanish.
3. Differentiate the culture, 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
54 total hours lecture 3 Units
ADVISORY: Eligibility for ENGL-090
The communicative approach to basic understanding and speaking of Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. The content used in learning the language is drawn from the rich Mexican, Chicano and Latino cultures. May not be repeated.
LMC: DA
TRANSFER: CSU

SPAN-050 Elementary Spanish I
90 total hours lecture 5 Units
ADVISORY: Eligibility for ENGL-090
A visual/oral/aural approach to understanding, speaking, reading, and writing Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. The content used in learning the language is drawn from the rich Mexican, Chicano, Afro-Caribbean and Latino cultures. It is highly recommended that upon 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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 6

SPAN-049 Conversational Latino Cinema
54 total hours lecture 3 Units
PREREQUISITE: SPAN-051
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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2

SPAN-045 Conversational Spanish II
54 total hours lecture 3 Units
ADVISORY: SPAN-044; eligibility for ENGL-090
The communicative approach to basic understanding and speaking of Spanish as it is used in Mexico, Central/South America, Spain, and the Southwestern United States. Conversational Spanish II is a continuation of conversational Spanish I (SPAN-044S) with more emphasis on students’ expressive skills. The content used in learning the language is drawn from the rich Mexican, Chicano and Latino cultures. May not be repeated.
LMC: DA
TRANSFER: CSU
SPAN-051  Elementary Spanish II
90 total hours lecture
5 Units
PREREQUISITE: SPAN-050 or 2 years of high school Spanish
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-051, the third course SPAN-052 be taken the following semester. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6

SPAN-052  Intermediate Spanish I
90 total hours lecture
5 Units
PREREQUISITE: SPAN-051 or 3 years high school Spanish
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. It is highly recommended that upon completion of SPAN-52, the fourth course SPAN-053 be taken the following semester. May not be repeated.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6

SPAN-053  Intermediate Spanish II
90 total hours lecture
5 Units
PREREQUISITE: SPAN-052 or 4 years high school Spanish
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.
LMC: DA
TRANSFER: UC; CSU Gen. Ed. Area C2; IGETC Area 3B, 6

SPAN-057  Spanish for Spanish Speakers I
54 total hours lecture
3 Units
PREREQUISITE: SPAN-053
ADVISORY: Eligibility for ENGL-090
A communicative course designed for native speakers of Spanish who wish to improve their skills in reading and writing Spanish, but open to other linguistically qualified students. Writing will be the main focus of class, but grammar, spelling, speaking and a variety of Spanish reading selections will also be included; as well as exposure to local and international Mexican, Chicano, and Latino cultures as a meaning system common heritage of the U.S. May not be repeated.
LMC: DA
TRANSFER: UC, CSU

SPAN-060  Exploring Latino Cinema: A Critical Analysis
54 total hours lecture
3 Units
PREREQUISITE: SPAN-052
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.
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.
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.
Transfer Studies

CERTIFICATES OF ACHIEVEMENT

CSU General Education (CSU-GE-Breadth)
Intersegmental General Education Transfer Curriculum (IGETC)

CERTIFICATE OF ACHIEVEMENT

CSU GENERAL EDUCATION (CSU-GE-BREADTH)

The Certificate of Achievement in CSU General Education (CSU-GE-Breadth) is a program designed for students planning to transfer to the California State University (CSU) System. It offers students a program of study which meets the lower division CSU general education requirements, and students who complete this certificate will only be required to complete a minimum of 9 semester units of upper division general education work at CSU after transfer.

Although the certificate recognizes the completion of lower division CSU general education requirements, it does not guarantee admission to a specific campus within the CSU system nor does it guarantee admission to a specific major. Some majors and colleges may require a different lower division preparation and/or a higher GPA than is necessary for this certificate.

Students who intend to transfer must meet all current CSU transfer requirements including minimum GPA and eligibility for certification. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended transfer school.

PROGRAM REQUIREMENTS

| Area A: Communication in the English Language and Critical Thinking | 9 |
| Area B: Physical Universe and Its Life Forms | 9 |
| Area C: Arts, Literature, Philosophy, and Foreign Languages | 9 |
| Area D: Social, Political, Economic Inst/Behavior; Historical Background | 9 |
| Area E: Lifelong Understanding and Self-Development | 4 |

MINIMUM TOTAL UNITS FOR THIS CERTIFICATE 40

MAXIMUM TOTAL UNITS FOR THIS CERTIFICATE 44

* The program also requires the completion of the U.S. History, Constitution and American Ideals (6 units) CSU-GE Breadth requirement, however the courses used to satisfy these units may also double count in Area D (above).

CERTIFICATE OF ACHIEVEMENT

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

The Certificate of Achievement in Intersegmental General Education Transfer Curriculum (IGETC) is a program designed for students planning to transfer to either the California State University (CSU) or University of California (UC) system. It offers students a program of study which meets IGETC general education transfer requirements.

Although the certificate recognizes the completion of IGETC general education requirements, it does not guarantee admission to a specific campus within the CSU or UC system nor does it guarantee admission to a specific major. Some majors and colleges may require a different lower division preparation and/or a higher GPA than is necessary for this certificate.

Students who intend to transfer must meet all current IGETC general education transfer requirements including minimum GPA and eligibility for certification. Students are strongly advised to meet with a counselor to discuss transfer requirements and lower division major preparation that is needed for their intended transfer school.

PROGRAM REQUIREMENTS

| Area 1: English Composition | 6-9 |
| Area 2: Mathematical Concepts and Quantitative Reasoning | 3 |
| Area 3: Arts & Humanities | 9 |
| Area 4: Social & Behavioral Sciences | 9 |
| Area 5: Physical & Biological Sciences | 7-9 |

MINIMUM TOTAL UNITS FOR THIS CERTIFICATE 37

MAXIMUM UNITS FOR THIS CERTIFICATE 43

Note: Students intending to transfer to the CSU system are advised that Area 1C (Oral Communication) is required and that an additional 6 units of study are required for the U.S. History, Constitution & American Ideals graduation requirement from CSU. Students intending to transfer to the UC system are advised that an additional 3-5 units of study are required for the Area 6: Languages Other Than English transfer requirement.

*The courses used to satisfy the U.S. History, Constitution and American Ideals (6 units) may also double count in Area 4 (above).

Minimum number of IGETC units that a student can earn from LMC and transferring to CSU 37
Minimum number of IGETC units that a student can earn from LMC and transferring to CSU 41
Minimum number of IGETC units that a student can earn from LMC and transferring to UC 37
Minimum number of IGETC units that a student can earn from LMC and transferring to UC 43

Program Student Learning Outcomes (for both Certificates of Achievement)

1. Communicate effectively, both verbally and in writing.
2. Critically analyze and solve problems using the appropriate technique for the issue at hand, including appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable.
3. Critically examine the function, media, subject matter, organization, aesthetic, style, and relative excellence of representative examples of the arts, literature, philosophy, and foreign languages including approaches from various historical, cultural, and gender-based origins.
4. Develop an understanding of the information available, the perspectives and approaches of the physical, biological, social and behavioral sciences, appreciating the power and limits of these methods of inquiry and both individual, ethical, and societal responsibilities.
5. Organize and present information in a logical and understandable manner.
Travel Marketing

DEGREE—Associate of Science
Travel Marketing

CERTIFICATE OF ACHIEVEMENT
Travel Marketing

COLLEGE SKILLS CERTIFICATES
Travel Marketing
Home-Based Travel Specialist Certificate
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.

REQUISITE 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><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>11</strong></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>All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</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><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

AND SELECT A MINIMUM OF 7 ELECTIVE UNITS 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>All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</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-097</td>
<td>Hawaii Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-098</td>
<td>Caribbean Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-099</td>
<td>South Pacific Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-100</td>
<td>Mexico Destination Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTAL UNITS FOR THE MAJOR</strong></td>
<td></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

**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. Apply critical thinking to research, evaluate, analyze, and synthesize travel-related information.

2. Demonstrate excellent communication skills as well as soft skills in a sales and business environment.

3. Demonstrate knowledge of current technologies and apply 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.

REQUISITE 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-095</td>
<td>Advanced Travel Concepts</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL UNITS</strong></td>
<td></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

CONTINUED ON NEXT PAGE >
AND SELECT A MINIMUM OF 3 ELECTIVE UNITS FROM:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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-077</td>
<td>Customized Vacation Planning</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-082</td>
<td>All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</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-114</td>
<td>Group Travel Management</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL-130</td>
<td>Home Based Travel: Launching Your Business</td>
<td>1</td>
</tr>
<tr>
<td>TRAVL-131</td>
<td>Home Based Travel: Success Factors</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-170</td>
<td>Cooperative Education in Travel</td>
<td>1-2</td>
</tr>
<tr>
<td>TRAVL 900*</td>
<td>Selected Topics in Travel</td>
<td>0.3-3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 12

Program Student Learning Outcomes

1. Apply basic skills to research and evaluate travel-related information.
2. Demonstrate fundamental sales and marketing skills, as related to the travel industry.
3. Demonstrate basic knowledge of current technologies used 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.

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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-130</td>
<td>Home Based Travel: Launching Your Business</td>
<td>1</td>
</tr>
<tr>
<td>TRAVL-131</td>
<td>Home Based Travel: Success Factors</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS 9

SELECT 3 UNITS OF DESTINATION SPECIALIST GEOGRAPHY COURSES FROM:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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-083</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>
</tbody>
</table>

AND SELECT A MINIMUM OF 5 ELECTIVE UNITS FROM:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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-077</td>
<td>Customized Vacation Planning</td>
<td>2</td>
</tr>
<tr>
<td>TRAVL-082</td>
<td>All About Cruising</td>
<td>3</td>
</tr>
<tr>
<td>TRAVL-083</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-095</td>
<td>Advanced Travel Concepts</td>
<td>3</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-114</td>
<td>Group Travel Management</td>
<td>1.5</td>
</tr>
<tr>
<td>TRAVL 900*</td>
<td>Selected Topics in Travel</td>
<td>0.3-3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 17

*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. Apply critical thinking to research, evaluate, analyze, and synthesize travel-related information.
2. Demonstrate excellent communication skills as well as soft skills in a sales and business environment.
3. Demonstrate knowledge of current technologies and apply technological skills necessary to succeed in the travel industry.
4. Explain the steps, skills and requirements to legally and successfully run a home-based travel business.

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

REQUIRED COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAVL-082</td>
<td>All About Cruising</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>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 8

Note that it is practical to work toward multiple certificates at the same time. This will allow students to personalize their education and tailor it to meet their individual goals.

For information regarding specific course requirements, contact the Travel Department chair or inquire in the Counseling Center. You may also check online at www.losmedanos.edu/travel.

Program Student Learning Outcomes

1. Utilize appropriate resources to describe and evaluate cruises, individual ships, and their itineraries.
2. Demonstrate fundamental sales and marketing skills, as related to the travel industry in general, and cruising in particular.
3. Recommend appropriate cruise lines, cruise ships, and itineraries, based on client needs and preferences.
COURSE DESCRIPTIONS

TRAVL-072 Introduction to Travel
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
An introductory course designed to give students an overview of the travel industry and its various components. This course familiarizes students with terminology and basic concepts of each component of the travel industry, which includes the airline industry, the ground transportation industry, the hotel industry, the cruise industry and the tour industry. It will also provide the basic online skills needed to research basic travel questions. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-074 North American Destination Specialist
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
A course on travel geography and tourism within North America, including familiarization with places of tourist interest, itinerary planning, tour companies, and sources of reference. Includes a study of each of the 50 states and all Canadian provinces. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-075 Europe Destination Specialist
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
This course includes a discussion of geography, sightseeing options, tourist activities, resort areas and accommodations for each major region of Northern and Central Europe. Application of knowledge to traveler scenarios will be emphasized. Resources for more in-depth information will also be explored. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-076 Travel Sales and Marketing
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
This course will help the travel and tourism student prepare for a successful career selling travel. It will introduce the student to effective techniques and skills for service-oriented sales to succeed in the competitive environment of the travel industry. In an increasingly competitive marketplace, travel professionals will need an understanding of the broader sales environment. This course will incorporate coverage of basic marketing principles and discuss customer service as an integral part of the selling process. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-077 Customized Vacation Planning
36 total hours lecture
2 Units
ADVISORY: Eligibility for ENGL-090
This course will introduce students to the process of creating and customizing tours for individual travelers or for groups. Particular emphasis will be placed on how to plan and design an itinerary, select the vendor/s, finalize the tour arrangements, and market the tour. Learning to research travel industry print and electronic references is an indispensable component of creating customized vacations. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-082 All About Cruising
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
The course will introduce students to the cruise industry, cruise lines and their ships, the different “personalities” of the cruise ships; cruise destinations and itineraries around the world. It will also include cruise terminology and cruise selling skills. This is the core course in the Cruise Specialist Certificate. May not be repeated.
LMC: DA
TRANSFER: CSU

TRAVL-076 Travel Sales and Marketing
54 total hours lecture
3 Units
ADVISORY: Eligibility for ENGL-090
This course will help the travel and tourism student prepare for a successful career selling travel. It will introduce the student to effective techniques and skills for service-oriented sales to succeed in the competitive environment of the travel industry. In an increasingly competitive marketplace, travel professionals will need an understanding of the broader sales environment. This course will incorporate coverage of basic marketing principles and discuss customer service as an integral part of the selling process. May not be repeated.
LMC: DA
TRANSFER: CSU
<table>
<thead>
<tr>
<th>TRAVL-083</th>
<th>Hawaii Destination Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>1.5 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>This course includes a discussion of geography, tourist attractions and activities, resort areas and accommodations for each of the major islands of Hawaii. Particular emphasis on each island's unique appeal. Resources for more in-depth research are also covered. May not be repeated.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAVL-084</th>
<th>Caribbean Destination Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>1.5 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAVL-085</th>
<th>South Pacific Destination Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>1.5 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>The course covers the South Pacific region, including: Australia, New Zealand, and Pacific Islands. 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.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAVL-087</th>
<th>Mexico Destination Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>1.5 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>This course presents what is special about Mexico. The course includes an 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.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAVL-095</th>
<th>Advanced Travel Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>3 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: TRAVEL-072; eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>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 tour companies and other travel suppliers, 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.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TRAVL-096</th>
<th>Alaska Destination Specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 total hours lecture</td>
<td></td>
</tr>
<tr>
<td>1.5 Units</td>
<td></td>
</tr>
<tr>
<td>ADVISORY: Eligibility for ENGL-090</td>
<td></td>
</tr>
<tr>
<td>This course includes a discussion of geography, tourist attractions, activities, and accommodations for each of the major areas of Alaska. Particular emphasis is placed on each area's unique appeal. The course presents what's special about Alaska, sales strategies for tour products and niche markets, suggested itineraries, secrets of each region and local information. Resources for more in-depth research are also covered. May not be repeated.</td>
<td></td>
</tr>
<tr>
<td>LMC: DA</td>
<td></td>
</tr>
<tr>
<td>TRANSFER: CSU</td>
<td></td>
</tr>
</tbody>
</table>
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.

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

TRAVL-114 Group Travel Management

27 total hours lecture
1.5 Units

ADVISORY: Eligibility for ENGL-095

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. Emphasis will be placed on practical application of knowledge and skills. May not be repeated.

LMC: DA
TRANSFER: CSU

TRAVL-130 Home Based Travel: Launching Your Business

18 total hours lecture
1 Unit

ADVISORY: ENGL-090

This course explores all the components of establishing a new business. The course will offer an insight into what it takes to run a successful home-based travel business. It will provide information about the various types of home-based business set-ups and types of travel agencies that will host a home-based travel business. May not be repeated.

LMC: DA
TRANSFER: CSU

TRAVL-131 Home Based Travel: Success Factors

36 total hours lecture
2 Units

ADVISORY: ENGL-090

Many people have difficulty running a successful travel business, because they lack a proper plan. This class will help define business expectations, determine objectives, and begin to create a formal business plan. Students will determine which marketing approach would work best for their travel business. Students will learn about the various resources available to the travel professional and will develop a preferred supplier list for a home-based business. Students will also learn about the legal responsibilities of the travel professional. May not be repeated.

LMC: DA
TRANSFER: CSU

TRAVL-170 Occupational Work Experience Education in Travel

60-300 total hours
1-4 Units

PREREQUISITE: Approved online application

ADVISORY: Eligibility for ENGL-090

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

LMC: DA
TRANSFER: CSU
TRAVL-180 Internship in Travel
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application and employer placement
ADVISORY: Eligibility for ENGL-090
This course is for students who have declared a major, have taken classes in the major, and are ready for on-the-job experience in a paid or unpaid position. An internship involves working in a skilled or professional level assignment in the area of a student’s vocational or academic major or field of interest. Students, with faculty and employer approval, will apply college-acquired knowledge, skills and abilities as well as acquire new learning to prepare for a career in their chosen filed. Students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn a maximum of 16 units of occupational work experience internship during community college attendance which may be applied as electives toward graduation. 12 units are transferable to CSU.
LMC: DA
TRANSFER: CSU

TRAVL-900s Selected Topics in Travel Merchandising
DA varies with course content.

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

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD-010 Basic Arc Welding Theory</td>
<td>3</td>
</tr>
<tr>
<td>WELD-011 Basic Shielded Metal Arc Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-015 Basic Oxyacetylene Welding</td>
<td>2</td>
</tr>
<tr>
<td>WELD-016 Advanced Oxyacetylene Welding</td>
<td>1</td>
</tr>
<tr>
<td>WELD-020 Intermediate Shielded Metal Arc Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-021 Advanced Shielded Metal Arc Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-031 TIG Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-033 MIG Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-035 Blueprint Reading for Welders</td>
<td>3</td>
</tr>
<tr>
<td>WELD-040 TIG, MIG and FCA Welding Theory</td>
<td>3</td>
</tr>
<tr>
<td>WELD-041 Pipe Welding Practice</td>
<td>2</td>
</tr>
<tr>
<td>WELD-043 Flux-Core Arc Welding Practice</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED IN MAJOR COURSES 26

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.

REQUIRED COURSES: UNITS
WELD-010 Basic Arc Welding Theory 3
WELD-011 Basic Shielded Metal Arc Welding Practice 2
WELD-015 Basic Oxyacetylene Welding 2
WELD-016 Advanced Oxyacetylene Welding 1
WELD-020 Intermediate Shielded Metal Arc Welding Practice 2
WELD-021 Advanced Shielded Metal Arc Welding Practice 2
WELD-031 TIG Welding Practice 2
WELD-033 MIG Welding Practice 2
WELD-035 Blueprint Reading for Welders 3
WELD-040 TIG, MIG and FCA Welding Theory 3
WELD-041 Pipe Welding Practice 2
WELD-043 Flux-Core Arc Welding Practice 2
ENGL-090 Integrated Reading, Writing and Critical Thinking 5
or
ENGL-100 College Composition 3
MATH 12 or higher* Prealgebra 4
or
COMSC-040 Introduction to Computers 4
or
COMSC-049 Computer Literacy 1.5

TOTAL UNITS REQUIRED FOR THIS CERTIFICATE 33.5-39

*Possible higher Math courses (3-7 units) 25, 26, 27, 29, 30, 34, 35, 37, 40, 50, 60, 75, 80, 120, 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.

COLLEGE SKILLS CERTIFICATE
WELDING PRE-APPRENTICESHIP

REQUIRED COURSES: UNITS
WELD-010 Basic Arc Welding Theory 3
WELD-011 Basic Shielded Metal Arc Welding Practice 2
MATH-012 PreAlgebra Math 4

TOTAL UNITS REQUIRED FOR COLLEGE SKILLS CERTIFICATE 9

Program Student Learning Outcomes
1. Be able to know and have an appreciation for the safety knowledge required in the welding trade.
2. Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting 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.

COURSE DESCRIPTIONS

WELD-010 Basic Arc Welding Theory
54 total hours lecture
3 Units
ADVISORY: Concurrent enrollment in WELD-011; eligibility for ENGL-090
This course is required of all beginning arc welding students to assist them in developing the knowledge of safety and safe practices, fundamentals of Shielded Metal Arc Welding, power sources, and AWS classification of electrodes and electrode selection. Topics included in this course are: Welding terminology, flame cutting, control of distortion, welding procedure specifications and pipe welding. May not be repeated.
LMC: DA
TRANSFER: CSU

WELD-011 Basic Shielded Metal Arc Welding Practice
108 total hours lab
2 Units
ADVISORY: WELD-010; eligibility for ENGL-090
This lab course is required for all beginning arc welding students. Students will practice plate fillet welding in all positions with the SMAW process as well as flame cutting and gouging. May not be repeated.
LMC: DA
TRANSFER: CSU

WELD-015 Basic Oxyacetylene Welding
18 total hours lecture, 54 total hours lab
2 Units
ADVISORY: WELD-010; eligibility for ENGL-095
This course covers oxy-fuel welding of sheet-metal, tubes and pipes in all positions, and braze welding of steel. It also includes safe operating and proper welding procedures, filler rod selection, fluxes, and control of distortion. Students are introduced to flame cutting operations using manual and machine torches. May not be repeated.
LMC: DA
TRANSFER: CSU
WELDING TECHNOLOGY

WELD-016  Advanced Oxyacetylene Welding
54 total hours lab
1 Unit
PREREQUISITE: WELD-015
ADVISORY: WELD-010; eligibility for ENGL-095
This course covers advanced oxyacetylene welding procedures. The oxyacetylene welding process will be used to weld both ferrous and non-ferrous metals, and silver braze of non-ferrous metals. Students will gain additional proficiency in flame cutting operations using manual and machine torches. May not be repeated.
LMC: DA
TRANSFER: CSU

WELD-020  Intermediate Shielded Metal Arc Welding Practice
108 total hours lab
2 Units
ADVISORY: WELD 10 and WELD-011; eligibility for ENGL-095 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.
LMC: DA
TRANSFER: CSU

WELD-021  Advanced Shielded Metal Arc Welding Practice
108 total hours lab
2 Units
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. Air Carbon Arc Gouging techniques and practice. May not be repeated.
LMC: DA
TRANSFER: CSU

WELD-031  TIG Welding Practice
108 total hours lab
2 Units
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.
LMC: DA
TRANSFER: CSU

WELD-033  MIG Welding Practice
108 total hours lab
2 Units
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.
LMC: DA
TRANSFER: CSU

WELD-035  Blueprint Reading for Welders
54 total hours lecture
3 Units
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.
LMC: DA
TRANSFER: CSU
WELD-040  TIG, MIG and FCA Welding Theory
54 total hours lecture
3 Units
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.
LMC: DA
TRANSFER: CSU

WELD-041  Pipe Welding Practice
108 total hours lab
2 Units
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.
LMC: DA
TRANSFER: CSU

WELD-043  Flux-Core Arc Welding Practice
108 total hours lab
2 Units
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.
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.
LMC: Independent study courses may be DA or transferable depending on specific course. See your counselor.
TRANSFER: Independent study courses may be DA or transferable depending on specific course. See your counselor.

WELD-170  Occupational Work Experience Education in Welding
60-300 total hours
1-4 Units
PREREQUISITE: Approved online application
ADVISORY: Eligibility for ENGL-090
This course is for students whose work is related to their major. Occupational Work Experience Education provides students with opportunities to develop marketable skills in preparation for employment or advancement within their current job. To participate in cooperative work experience education, students must be employed or formally volunteer and undertake new or expanded responsibilities. Students, with faculty and employer approval, will develop and successfully complete one learning objective for each unit of credit in which they enroll. Additionally, students must work 75 paid hours or 60 non-paid hours for each unit of credit earned. Students may earn up to 8 units per semester and may repeat for a maximum of 16 units of occupational work experience during community college attendance which may be applied as electives toward graduation.
LMC: DA
TRANSFER: CSU
**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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN-065</td>
<td>American Sign Language I</td>
<td>3</td>
</tr>
<tr>
<td>FILIP-060</td>
<td>Elementary Filipino I</td>
<td>5</td>
</tr>
<tr>
<td>ITAL-060</td>
<td>Elementary Italian I</td>
<td>5</td>
</tr>
<tr>
<td>FRNCH-060</td>
<td>Elementary French I</td>
<td>5</td>
</tr>
<tr>
<td>SPAN-050</td>
<td>Elementary Spanish I</td>
<td>5</td>
</tr>
</tbody>
</table>

**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.

**COURSE DESCRIPTIONS**

**WDLG-100 International Language and Culture**

54 total hours lecture
3 Units

In this course, students will explore the basics of language and cultural dimensions of the country they have chosen to study. Whether in the polychronic and late-night culture of a Catalonia or the unique connection between food and life in France; this course examines cultural, language, and lifestyle elements essential to understand the location that students are studying. May not be repeated.
Appendices
## Los Medanos Administrators Emeriti

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alatorre, Arthur</td>
<td>Director of Student Services</td>
</tr>
<tr>
<td>Carhart, John</td>
<td>President</td>
</tr>
<tr>
<td>Case, Chester H.</td>
<td>President</td>
</tr>
<tr>
<td>Chin, Stanley H.</td>
<td>President</td>
</tr>
<tr>
<td>Collins, Charles</td>
<td>Dean of Humanistic Studies</td>
</tr>
<tr>
<td>Cromer, Lyle</td>
<td>Assistant Dean of Health Sciences</td>
</tr>
<tr>
<td>Custodio, Vince</td>
<td>Dean of Behavioral Science</td>
</tr>
<tr>
<td>Cutler, Bruce</td>
<td>Vice President, Administrative Services</td>
</tr>
<tr>
<td>Donatelli, A. Don</td>
<td>Director of Learning Resources</td>
</tr>
<tr>
<td>Henry, Daniel</td>
<td>Vice President, Director of Admissions &amp; Records</td>
</tr>
<tr>
<td>Johnson, Thayer</td>
<td>Director of Admissions &amp; Records</td>
</tr>
<tr>
<td>Kamath, Kiran</td>
<td>Sr. Dean of Planning &amp; Institutional Effectiveness</td>
</tr>
<tr>
<td>Kishi, Thais</td>
<td>Psychology</td>
</tr>
<tr>
<td>Karp, Marie</td>
<td>Counseling</td>
</tr>
<tr>
<td>Leung, Shirley</td>
<td>Business</td>
</tr>
<tr>
<td>Lisle, Chappie</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Lynch, Barbara</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Livingston, Richard</td>
<td>Senior Dean of Instruction</td>
</tr>
<tr>
<td>Maynes, Lindy</td>
<td>Executive Director, LMC Foundation</td>
</tr>
<tr>
<td>McDonald, Diana</td>
<td>Dean of Occupational Education</td>
</tr>
<tr>
<td>McKeown, Joseph</td>
<td>Assistant Dean of Administration of Justice</td>
</tr>
<tr>
<td>McNulty, James</td>
<td>Buildings &amp; Grounds Manager</td>
</tr>
<tr>
<td>Medinsky, David</td>
<td>Career Development Manager</td>
</tr>
<tr>
<td>Rodriguez, Gil</td>
<td>Dean of Liberal Arts &amp; Sciences</td>
</tr>
<tr>
<td>Robert Skapura</td>
<td>Senior Dean of Instructional Technology</td>
</tr>
<tr>
<td>Skee, Esther</td>
<td>Police Services Lieutenant</td>
</tr>
<tr>
<td>Smith, Sandra</td>
<td>Director of Business Services</td>
</tr>
<tr>
<td>Taylor, Jim</td>
<td>Buildings &amp; Grounds Manager</td>
</tr>
<tr>
<td>Torres, Felipe</td>
<td>Director of Special Programs</td>
</tr>
<tr>
<td>Williams, Carlton</td>
<td>Dean of Social and Economic Studies</td>
</tr>
<tr>
<td>Wilson, Glenn.</td>
<td>Custodial Manager</td>
</tr>
</tbody>
</table>

## Los Medanos Faculty Emeriti

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arenivar, Olga</td>
<td>Speech</td>
</tr>
<tr>
<td>Austin, Barbara</td>
<td>English</td>
</tr>
<tr>
<td>Bachmann, Nancy</td>
<td>Music</td>
</tr>
<tr>
<td>Bank, Judith</td>
<td>English</td>
</tr>
<tr>
<td>Baskin, Shirley</td>
<td>Counseling</td>
</tr>
<tr>
<td>Biles, Lorraine Leith</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Boisvert, Kate</td>
<td>Astronomy</td>
</tr>
<tr>
<td>Bonds, Edwin H</td>
<td>Librarian</td>
</tr>
<tr>
<td>Boschetti, Van</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Boucher, Gail</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Brown, Brendan</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Cameron, Jasper C.</td>
<td>English</td>
</tr>
<tr>
<td>Campis, Carmen</td>
<td>Business</td>
</tr>
<tr>
<td>Castillo-Alward, Sandra</td>
<td>Nursing</td>
</tr>
<tr>
<td>Cecchini, Eva</td>
<td>Nursing</td>
</tr>
<tr>
<td>Cesa, Margaret</td>
<td>English</td>
</tr>
<tr>
<td>Clark, Spencer</td>
<td>Electronics</td>
</tr>
<tr>
<td>Coats, Elisabeth</td>
<td>Nursing</td>
</tr>
<tr>
<td>Coriosso, April</td>
<td>Librarian</td>
</tr>
<tr>
<td>Crouch, William R.</td>
<td>Nursing</td>
</tr>
<tr>
<td>Davis, Jerry W.</td>
<td>Biological Science</td>
</tr>
<tr>
<td>DeAnda, Natividad</td>
<td>Counseling</td>
</tr>
<tr>
<td>Doob, Peter</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Duggan, Curtis J.</td>
<td>Business</td>
</tr>
<tr>
<td>Fisher, Dorothy</td>
<td>Counseling</td>
</tr>
<tr>
<td>Fracisco, William</td>
<td>Counseling</td>
</tr>
<tr>
<td>Frates, Jeffrey</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Gallup, Terry</td>
<td>Nursing</td>
</tr>
<tr>
<td>Garfield, Leo</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Glennon, James</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Goldstein, Barry</td>
<td>Business</td>
</tr>
<tr>
<td>Gonzales, Pablo</td>
<td>English</td>
</tr>
<tr>
<td>Gottlieb, Phillip</td>
<td>Counseling</td>
</tr>
<tr>
<td>Hagelin, Christine</td>
<td>Biology</td>
</tr>
<tr>
<td>Hansen, Paul</td>
<td>Biology</td>
</tr>
<tr>
<td>Harmon, Lorne</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Hunnicutt, Dora B. (Jane)</td>
<td>Geography</td>
</tr>
<tr>
<td>Janes, Donal</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Jacobs, Stan J.</td>
<td>Language Arts</td>
</tr>
<tr>
<td>Johnson, Sharon</td>
<td>Nursing</td>
</tr>
<tr>
<td>Jorgensen, Diane</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Juarez, Angel</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Kaiper, Don</td>
<td>History</td>
</tr>
<tr>
<td>Karp, Marie</td>
<td>Counseling</td>
</tr>
<tr>
<td>Kishi, Thais</td>
<td>Psychology</td>
</tr>
<tr>
<td>Leung, Shirley</td>
<td>Business</td>
</tr>
<tr>
<td>Lisle, Chappie</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Lynch, Barbara</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Malone, Susanne</td>
<td>Nursing</td>
</tr>
<tr>
<td>Maltester, John</td>
<td>Music</td>
</tr>
<tr>
<td>Marino, Ofelia</td>
<td>Psychology/Counseling</td>
</tr>
<tr>
<td>Marshall, Robert H.</td>
<td>Economics</td>
</tr>
<tr>
<td>Maxey, Charles</td>
<td>Appliance Service Technology</td>
</tr>
<tr>
<td>McCaughey, Cathy</td>
<td>Nursing</td>
</tr>
<tr>
<td>McCluskey, William F.</td>
<td>Business</td>
</tr>
<tr>
<td>McDaniel, Nancy</td>
<td>Nursing</td>
</tr>
<tr>
<td>McKnight, Don</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Miller, Michael J.</td>
<td>Automotive &amp; Engine Technology</td>
</tr>
<tr>
<td>Moore, Harold</td>
<td>Management</td>
</tr>
<tr>
<td>Murray, Eva</td>
<td>Nursing</td>
</tr>
<tr>
<td>Nakaji, Dave</td>
<td>Physics</td>
</tr>
<tr>
<td>Nakaji, Karen</td>
<td>English</td>
</tr>
<tr>
<td>Nash, Brad</td>
<td>Business</td>
</tr>
<tr>
<td>Nuxoll, Mary Jo</td>
<td>Nursing</td>
</tr>
<tr>
<td>Ochoa, Andres</td>
<td>Welding</td>
</tr>
<tr>
<td>Olsen, Janet</td>
<td>Business</td>
</tr>
<tr>
<td>Pearman, Elizabeth</td>
<td>Business</td>
</tr>
<tr>
<td>Potter, Wayne</td>
<td>Welding</td>
</tr>
<tr>
<td>Price, Leonard</td>
<td>Appliance Service Technology</td>
</tr>
<tr>
<td>Puccioni, Madeline</td>
<td>English</td>
</tr>
<tr>
<td>Ramirez, Daniel</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Rodriguez, Carmen</td>
<td>Social Science</td>
</tr>
<tr>
<td>Sansen, Oliver</td>
<td>Administration of Justice</td>
</tr>
<tr>
<td>Schweikert, Mitch</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Shaffer, Harriet K.</td>
<td>Child Development</td>
</tr>
<tr>
<td>Shrieve, Elizabeth</td>
<td>Nursing</td>
</tr>
<tr>
<td>Siño, Hope J.</td>
<td>Business</td>
</tr>
<tr>
<td>Simpson, Linda</td>
<td>Librarian</td>
</tr>
<tr>
<td>Smith, Erma</td>
<td>Psychology</td>
</tr>
<tr>
<td>Smith, Gerry</td>
<td>Music</td>
</tr>
<tr>
<td>Smith, Stanley E.</td>
<td>Music</td>
</tr>
<tr>
<td>Starski, Mary Jo</td>
<td>Health Science</td>
</tr>
<tr>
<td>Stein, Jeannine</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Stewart, Janhavi</td>
<td>Nursing</td>
</tr>
<tr>
<td>Strain, Tom</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Syum, Robert L.</td>
<td>Welding</td>
</tr>
<tr>
<td>Thomas, Gary (Skip)</td>
<td>Physical Education</td>
</tr>
<tr>
<td>Trapp, G. Louis</td>
<td>Drafting</td>
</tr>
<tr>
<td>Tsuji, Muriel</td>
<td>Nursing</td>
</tr>
<tr>
<td>Wagener, J. Patrick</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Whitman, Nancy</td>
<td>Spanish</td>
</tr>
<tr>
<td>Willett, Kathleen</td>
<td>Biology</td>
</tr>
<tr>
<td>Yamakoshi, Lois</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Yeoman, Eric B.</td>
<td>Natural Science</td>
</tr>
<tr>
<td>Zipkin, Naomi</td>
<td>Child Development</td>
</tr>
</tbody>
</table>
Los Medanos Full-Time Faculty / Administrators / Supervisors

Adkins, Theodora ................................................................. Business
B.A., Cal State Univ, East Bay

Alexander, Kenneth ......................................................... Art
B.A., M.A., Cal State Univ, Sacramento

Archaga, Teresia .............................................................. Director of Student Retention & Support Services
B.A., Cal State Univ Hayward; M.A. John F. Kennedy Univ

Arcidiacono, Marie ......................................................... Speech Communication
B.A., M.A., Cal State Univ East Bay

Armendariz, Rosa ............................................................ Humanistic Studies
B.A., Stanford Univ

Armour, Robin ............................................................... Director of Admissions & Records
B.A., M.S., National Univ

Beal, Tawny ................................................................. Management
B.S., Univ Cal, Berkeley; M.S., Univ Oxford; Ed.D., Saint Mary’s College

Bearden, Joshua ............................................................. History
B.A., Samford Univ; M.A. Univ of Alabama, Birmingham

Becker, Michael ................................................................. Technology Systems Manager
B.A., Occidental College; B.S., California Inst of Technology; M.S., Univ of Cal, Berkeley

Belman, David ................................................................. Dean of Student Success
B.A., M.A., Univ of the Pacific

Benford, Jeffrey ................................................................. Dean of Counseling & Student Support
B.A., Morehouse College; M.Div., Interdenominational Theological Center

Bent, Joanne ................................................................. Nursing
B.F.A., Univ of New Mexico; M.S.N., San Francisco State Univ

Bonner, Jeannne ............................................................. Physics
B.S., Univ Cal, Davis

Buettner-Ouellette, Jill .................................................. English
B.A., Cal State Univ, Fresno; M.A., Cal State Univ, Sacramento

Cabral, Scott ................................................................. Astronomy
B.A., Univ Cal, Berkeley; M.S., San Francisco State Univ

Caldwell, Tselane ............................................................ English
B.A., M.A., Univ Cal, Berkeley

Caples, Melinda ............................................................... Chemistry
B.S., Cal State Univ, San Marcos; Ph.D., Univ of Maryland School of Medicine

Cea, Jorge ................................................................. Academic/Student Services Manager-Outreach
B.A., San Francisco State Univ

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 Univ

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

Conner, Kristin ............................................................... Director of Transfer & Career Services
A.A., Diablo Valley College; B.A., Sonoma State Univ; M.S., San Francisco State Univ; Ed.D., Univ of San Francisco

Corlew, Curtis .............................................................. Art/Journalism
A.A., Diablo Valley College; B.A., San Francisco State Univ

Costanza, Elizabeth ........................................................ Counselor
B.A., St. Mary’s College; M.S., San Francisco State Univ

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 Univ

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

Dorritie, Frank .............................................................. Recording Arts
B.A., Manhattan College

Edwards, Barry ............................................................. Custodial Manager
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estrada, Rick</td>
<td>A.A., Modesto Junior College; B.A., M.A., San Francisco State Univ.</td>
</tr>
<tr>
<td>Estrada, Robert</td>
<td>B.A., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Freeman, Jr., Steven</td>
<td>A.A., Chicago State Univ; M.B.A., Maryhurst Univ</td>
</tr>
<tr>
<td>Garcia, Nicholas</td>
<td>B.A., Univ of California, Berkeley</td>
</tr>
<tr>
<td>Gardner, Kasey</td>
<td>B.A., Western Kentucky Univ; M.A., Univ of the Pacific; MBA, St. Mary's College</td>
</tr>
<tr>
<td>Gesink, Dann</td>
<td>A.A.S., Kalamazoo Valley Community College</td>
</tr>
<tr>
<td>Ghiselli, Nina</td>
<td>B.A., Univ of Cal, Berkeley; Doctor of Psychology, Alliant International Univ</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>
</tr>
<tr>
<td>Godinez, Marco</td>
<td>B.A., Los Medanos College; B.A., Cal State Univ; East Bay; M.A., John F. Kennedy Univ</td>
</tr>
<tr>
<td>Goff, Christina</td>
<td>Librarian, Instruction/Library Director</td>
</tr>
<tr>
<td>Goodin, Ruth</td>
<td>Dean of Institutional Equity &amp; Advancement (Interim)</td>
</tr>
<tr>
<td>Graver, Dennis</td>
<td>B.S., Santa Clara Univ; Ph.D., Stanford Univ</td>
</tr>
<tr>
<td>Grillo, A. Michael</td>
<td>B.S., Cal State Univ, Long Beach</td>
</tr>
<tr>
<td>Gund, Paula</td>
<td>B.A., Univ of Washington; M.A., Monterey Inst of International Studies; Ph.D., Univ of Arizona</td>
</tr>
<tr>
<td>Hailey, Anthony</td>
<td>B.A., Univ of the State of New York; M.A., San Jose State Univ.</td>
</tr>
<tr>
<td>Hannum, Natalie</td>
<td>B.S., Cal State Univ Chico; M.A., Cal State Univ San Bernadino</td>
</tr>
<tr>
<td>Hawkes, Debra</td>
<td>B.S.N., Brigham Young Univ</td>
</tr>
<tr>
<td>Henderson, Silvester</td>
<td>B.M., M.A., San Francisco State Univ</td>
</tr>
<tr>
<td>Herman, Mel.</td>
<td>B.A., Univ of Cal, Berkeley; A.S.N. Merritt College; M.S.N. Loyola Univ</td>
</tr>
<tr>
<td>Hilbrant, Joel</td>
<td>B.A. Univ of Colorado; M.A., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Hobbs, Joan</td>
<td>A.A., Los Medanos College; B.A., Cal State Univ, Chico; M.A., San Francisco State Univ</td>
</tr>
<tr>
<td>Holt, Russell</td>
<td>B.A., Diablo Valley College</td>
</tr>
<tr>
<td>Holtmann, Erich</td>
<td>B.S., M.S., Ph.D., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Horan, Kevin</td>
<td>B.A., Saint Mary's College; M.S., Western Illinois Univ; Ed.D., Saint Mary's College</td>
</tr>
<tr>
<td>Hsieh, Durwynne</td>
<td>B.S., Mass Institute of Technology; Ph.D., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Hubbard, Scott</td>
<td>B.A., Sonoma State Univ.; M.A., Wake Forest Univ</td>
</tr>
<tr>
<td>Huddleston, Ryan</td>
<td>A.A., Diablo Valley College</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>Johnson, Scott</td>
<td>B.A., Univ of Washington</td>
</tr>
<tr>
<td>Jones, Erinda</td>
<td>Child Development</td>
</tr>
<tr>
<td>Kratchovil, Bob</td>
<td>B.A., M.P.A., Univ of Southern California; Ed.D., Cal State Univ, Stanislaus</td>
</tr>
<tr>
<td>Landers, Mara</td>
<td>B.A., Swarthmore College; M.A., Ph.D., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Lewis, Mark</td>
<td>B.A., Ph.D., Univ Cal, Berkeley</td>
</tr>
<tr>
<td>Lindgren, Haydee</td>
<td>B.A., Cal State Univ, Fullerton; M.S., San Francisco State Univ</td>
</tr>
<tr>
<td>Lugani, Shalini</td>
<td>B.A., M.A., Univ of Delhi; M.A., Jawaharlal Nehru Univ; Ph.D., Univ of Georgia</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Lynn, Morgan
B.A., Holyoke College; M.Ed., Boston Univ.; M.A., San Francisco State Univ.
English

Ma, Jennifer
B.S., Univ Cal, Davis
Financial Aid Supervisor

Mack, Michelle
B.A., Cal State Univ, Sacramento; M.A., San Jose State Univ.
Counselor

Magante, Maria
B.A., M.S., San Francisco State Univ.
Mathematics

Matthews, Jeffrey Mitchell
B.A., San Francisco State University
English/LGBT Studies

McCarthy, Brian
B.S., Univ Cal, San Diego; M.S., San Francisco State Univ.

McDowell, Colin
A.A., Contra Costa College; B.S.N., Merritt College; M.S., Holy Names College
Nursing

McGrath, Cynthia
B.A., Univ of Massachusetts; M.S., San Jose State Univ
Journalism

McIlvaine, Nancy
M.A., California State University, Fullerton

Meyer, Joseph
A.S., College of San Mateo; B.S., Cal Poly State Univ, San Luis Obispo
Welding Technology

Miller, Stacey
B.A., Colorado State Univ; M.A., National Univ.

Mitchell, Caitlin
B.A., St. Mary's College; M.A., Mills College

Moore, A'kilah
B.S., Spelman College, Georgia; M.S., Howard Univ, Washington, D.C.; Ed.D., Saint Mary's College
Dean of Mathematics & Sciences

Morales, Luis
A.A., Contra Costa College; B.A., Cal State Univ, East Bay; M.A., John F. Kennedy Univ

Nasworthy, Cecil
B.S., Georgia Southern College
Electromechanical Technology

Newman, Galil
A.A., Fullerton College; B.A., Cal State Univ, Long Beach; M.P.A. Cal State Univ, East Bay
Senior Dean of Student Services & Brentwood Center

Nielsen, Kathryn
B.A., Cal State Univ, Long Beach; M.S., Cal State Univ, East Bay

Noel, James
B.S., US Air Force Academy; M.S., Univ of Arizona; M.A., Graduate Theological Union

Norris, Michael
B.S., Univ of California; M.S., University of California, Los Angeles

Olatunji, Aderonke
B.A., Cal State Univ East Bay; MBA, Brandman Univ
Director of Business Services

Ortiz, Earl
A.S., Los Medanos College
Automotive

Padilla-Wilson, Liana
B.A., Saint Mary's College; M.A., Arizona State Univ

Pedersen, Ryan
B.A., B.S., Univ of the Pacific; M.S., Univ of Colorado

Perfumo, Pamela
B.A. Cal State Univ, East Bay; M.S., Univ of Oregon
Child Development

Perrone, Maria
B.S., M.S., Catholic University, Brescia, Italy

Perry, Josephine
A.S., Los Medanos College

Poku, Kwadwo
B.S., Univ of Science & Technology, Kumasi; M.A., Univ Cal, Berkeley
Mathematics

Pon, Melissa
B.A., Univ Cal Irvine; M.S., Cal State Univ, Long Beach

Ralston, Coleen
B.S., Cal State Univ, San Francisco; M.S., Cal State Univ, East Bay
Physical Education

Ramirez, Sophia
B.A., M.S., Cal State Univ, San Francisco; Ed.D. Univ of San Francisco
Counselor

Reyes, David
B.A., Univ Cal, San Diego; M.S., San Francisco State Univ.

Richards, Virginia
B.A. Univ Cal Irvine; M.A., Chapman Univ
Manager of Disability Support Services

Rickman, Jancy
B.S., Emerson College; M.A., San Francisco State Univ

Rosas, Carla
B.A., Cal State Univ, East Bay; M.A., Saint Mary's College

Rose, Rudolf
B.A., Univ Cal, San Diego; M.A., Saint Mary's College
Counselor

Rust, Tue
B.A., Univ Cal, Berkeley; M.S., San Jose State Univ

Mathematics
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree(s)</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A., Los Medanos College; B.A., Cal State Univ, Hayward</td>
<td>Villegas, Richard</td>
<td>Athletic Director/Physical Education</td>
</tr>
<tr>
<td>B.S., Cal State Univ, San Bernadino</td>
<td>Von Bergen, Julie</td>
<td>Mathematics</td>
</tr>
<tr>
<td>B.A., Univ Cal San Diego; M.A., San Francisco State Univ; M.A., Univ Cal Berkeley</td>
<td>Wahl, David</td>
<td>Program Manager, Workforce &amp; Economic Development</td>
</tr>
<tr>
<td>B.A., Los Medanos College, B.A. Cal State Univ Long Beach, M.A. Cal State Univ East Bay</td>
<td>Warfe, Scott</td>
<td>English</td>
</tr>
<tr>
<td>B.A., Cal State Univ Fullerton</td>
<td>Wellbrock, Sharon</td>
<td>Biological Science</td>
</tr>
<tr>
<td>B.A., Univ Cal, Santa Cruz; D.C., Palmer College of Chiropractic</td>
<td>Wentworth, Kimberly</td>
<td>Librarian, Electronic/Technical Services</td>
</tr>
<tr>
<td>B.S., Clemson Univ; M.L.I.S., San Jose State Univ</td>
<td>Westbrook, Nicole</td>
<td>Counselor</td>
</tr>
<tr>
<td>B.A., Univ of Cal, Davis; M.A., St. Mary's College</td>
<td>Wilkins, Penny</td>
<td>Business</td>
</tr>
<tr>
<td>B.A., M.A., Doctorate of Management, Univ of Phoenix; M.S. Cal State Univ East Bay</td>
<td>Wright, Sharice</td>
<td>Counselor</td>
</tr>
<tr>
<td>B.A., Sonoma State Univ; M.S., Cal State Univ, Sacramento</td>
<td>Ybarra, Nancy</td>
<td>Dean of Liberal Arts</td>
</tr>
<tr>
<td>B.S., Indiana Univ of Pennsylvania; M.Ed., Saint Mary's College</td>
<td>Yeong, Michael</td>
<td>Reading</td>
</tr>
<tr>
<td>B.A., St. Francis College; M.A., Antioch College</td>
<td>Zhu, Yongmin</td>
<td>English/ESL</td>
</tr>
<tr>
<td>B.A., Hanzhou Univ - China; M.A., Univ of Utah; Ed.D., Saint Mary's College</td>
<td>Zilber, Michael</td>
<td>Music</td>
</tr>
<tr>
<td>B.M., New England Conservatory of Music; M.A., Tufts Univ; Doctor of Arts, New York Univ.</td>
<td>Zinny, David</td>
<td>Political Science</td>
</tr>
<tr>
<td>B.M., Univ of Chicago; M.A., Ph.D., Yale Univ.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjunct professors are listed online at www.losmedanos.edu/adjunct.

Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adkins, Jennifer</td>
<td>Senior Executive Assistant</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Ahlborn, Diane</td>
<td>Lead Admissions/Records Assistant</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Almassey, Nicole</td>
<td>Assessment Center Coordinator</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>B.A., Univ of Cal, Davis; MBA, Cal State Univ, Sacramento</td>
<td>Anicetti, Rachel</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>B.A., Univ of Cal, Santa Cruz; M.S.W., Cal State Univ East Bay</td>
<td>Baskin, Deborah</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>B.A., Los Medanos College</td>
<td></td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Benzler, Camme</td>
<td>Senior Administrative Assistant</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Benzler, Sylvia</td>
<td>Administrative Assistant</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Chapman, Eloine</td>
<td>Senior Web Administrator</td>
<td></td>
</tr>
<tr>
<td>Carreon, Tamara</td>
<td>Financial Aid Assistant I</td>
<td></td>
</tr>
<tr>
<td>Chapmff, Eloine</td>
<td>Senior Web Administrator</td>
<td></td>
</tr>
<tr>
<td>Chen, San Mei</td>
<td>Custodian II</td>
<td></td>
</tr>
<tr>
<td>Cullar, Katherine</td>
<td>Administrative Assistant</td>
<td></td>
</tr>
<tr>
<td>Curtis, Jason</td>
<td>Police Services Officer</td>
<td></td>
</tr>
<tr>
<td>Davies, Daniel</td>
<td>Custodian II</td>
<td></td>
</tr>
<tr>
<td>Delgado, Robert</td>
<td>Office Assistant II</td>
<td></td>
</tr>
<tr>
<td>Diputado, Courtney</td>
<td>Technology Training &amp; Development Coordinator</td>
<td></td>
</tr>
<tr>
<td>Duldulao, Abigail</td>
<td>Administrative Assistant</td>
<td></td>
</tr>
<tr>
<td>Ellsworth, Ellen</td>
<td>Customer Services Clerk</td>
<td></td>
</tr>
<tr>
<td>Enea, Sebastian</td>
<td>Instructional Assistant</td>
<td></td>
</tr>
<tr>
<td>Fantuzzi, Angela</td>
<td>Family Life Education Specialist</td>
<td></td>
</tr>
<tr>
<td>Pettit, Putter</td>
<td>Administrative Assistant</td>
<td></td>
</tr>
<tr>
<td>Ferguson, Diane</td>
<td>Senior Admissions/Records Assistant</td>
<td></td>
</tr>
<tr>
<td>Ferguson, Teresa</td>
<td>Senior Library Assistant</td>
<td></td>
</tr>
<tr>
<td>Flagg, Yasmine</td>
<td>EOP&amp;S Assistant</td>
<td></td>
</tr>
<tr>
<td>Flores Zelaya, Reynaldo</td>
<td>Custodian II</td>
<td></td>
</tr>
<tr>
<td>Fonseca, Catherine</td>
<td>Student Services and Instructional Support Coordinator</td>
<td></td>
</tr>
<tr>
<td>Gallegos, Joel</td>
<td>Math Laboratory Coordinator – Brentwood</td>
<td></td>
</tr>
<tr>
<td>B.A., Univ Cal, Berkeley</td>
<td>Instructional Assistant</td>
<td></td>
</tr>
<tr>
<td>Garcia, Jennifer</td>
<td>Instructional Assistant</td>
<td></td>
</tr>
<tr>
<td>Gregory, Lisa</td>
<td>Administrative Secretary</td>
<td></td>
</tr>
<tr>
<td>Griffin, Kathleen</td>
<td>College Human Resources Assistant</td>
<td></td>
</tr>
<tr>
<td>Guzman, Gustavo</td>
<td>Campus Facilities Assistant</td>
<td></td>
</tr>
<tr>
<td>Green, Tamara</td>
<td>Senior Admissions/Records Assistant</td>
<td></td>
</tr>
<tr>
<td>Greene, Letta</td>
<td>Minority Student Retention Specialist</td>
<td></td>
</tr>
<tr>
<td>Green, Tamara</td>
<td>Senior Admissions/Records Assistant</td>
<td></td>
</tr>
<tr>
<td>Green, Tamara</td>
<td>Lead Admissions/Records Assistant</td>
<td></td>
</tr>
<tr>
<td>Harrison, Robin</td>
<td>Student Services and Instructional Support Coordinator</td>
<td></td>
</tr>
<tr>
<td>Holiday, Melissa</td>
<td>Custodian II</td>
<td></td>
</tr>
<tr>
<td>Hotton, Michael</td>
<td>Senior Parking Services Officer</td>
<td></td>
</tr>
<tr>
<td>Howe, Thomas</td>
<td>Police Services Officer</td>
<td></td>
</tr>
<tr>
<td>Jackson, Melissa</td>
<td>Student Services and Instructional Support Coordinator</td>
<td></td>
</tr>
<tr>
<td>Kendall, Ray</td>
<td>Grounds Worker/Gardener II</td>
<td></td>
</tr>
<tr>
<td>Kenrick, Margaret</td>
<td>Science Laboratory Coordinator</td>
<td></td>
</tr>
<tr>
<td>Kohler, Linda</td>
<td>Senior Accountant</td>
<td></td>
</tr>
<tr>
<td>Kolhoff, James</td>
<td>Computer &amp; Network Technician</td>
<td></td>
</tr>
<tr>
<td>Lares, Imelda</td>
<td>Admissions/Records Assistant II</td>
<td></td>
</tr>
<tr>
<td>A.A., Diablo Valley College</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Leung, Chunni ......................................................... Financial Aid Specialist
A.A., Los Medanos College; B.A., Cal State Univ, East Bay

Love, V. Carol ......................................................... Math Laboratory Coordinator - Brentwood
A.A., Diablo Valley College; B.A. Cal State Univ, East Bay

Leyba, Javier ......................................................... Financial Aid Assistant I
A.A., Los Medanos College; B.A. Cal State Univ, East Bay

Lozano, Fernando .................................................. Music Laboratory Coordinator
Macias, Antonio ..................................................... Building Maintenance Worker
Maniscalco, Linda ................................................... Senior Account Clerk- Cashier
McAlpin, Rashaad ................................................... Electronics Technician
A.A.S., ITT Technical Institute
McCoy, Marques ...................................................... Minority Student Retention Specialist
B.A., Univ Cal, Berkeley

McDermott, John .................................................... Athletic Equipment Manager II
B.A., Sonoma State Univ; M.S.S., U.S. Sports Academy
McEwen, Tennille ..................................................... Computer-Aided Instructional Lab Coordinator

McFarland, Lisa ........................................................ PBX Operator-Receptionist
B.A., Univ Cal, Berkeley

McLean, Sharen ...................................................... Satellite Business Services Coordinator - Brentwood
A.A., A.S., Los Medanos College

McQuaid, Michelle .................................................. Bookstore Operations Assistant
A.A., Lake Tahoe Community College; A.A., Los Medanos College

Medel, Gretchen .................................................... Fire Technology-EMS Instructional Lab Coordinator
B.S., Univ Cal Davis

Mills, Sandra ......................................................... Computer-Aided Instructional Lab Coordinator
A.A., Los Medanos College, B.A., Cal State Univ, East Bay

Molina, Phylis .......................................................... Financial Aid Assistant I – Brentwood
A.A., Sacramento City College; B.A., Univ of Florida

Monteverde, Eva ..................................................... CTE Programs Laboratory Equipment Technician II
Muir, Clark ............................................................. Bookstore Supply Buyer
A.A., Los Medanos College

Nelson, George ....................................................... Maintenance Mechanic
A.A., Los Medanos College, B.A., Cal State Univ, East Bay

Nguyen, John ......................................................... Student Services and Instructional Support Coordinator
A.A., Evergreen Valley College; B.A., Univ Cal, Berkeley

Nogarr, Justin .......................................................... Offset Technician II
A.A., Los Medanos College; B.S., Cal State Univ, Sacramento; M.A., Cal State Univ, SF; MBA, Brandman Univ.

O’Malley, Margaret .................................................. Instructional Assistant
B.A., Trinity College; M.S.W., Univ of Illinois; M.S., Cal State Univ East Bay

Oleson, Mary .......................................................... Police Services Officer
A.A., Los Medanos College

Olgin, Anthony ....................................................... Custodian II
Olsen, Eden ......................................................... Office Assistant II
A.A., Los Medanos College

Orange, Tammy ........................................................ Financial Aid Assistant II/Scholarship Coordinator
A.S., Los Medanos College; B.S., Ashford Univ

Ornelas, Janine ........................................................ Police Services Assistant/Dispatcher
A.S., Los Medanos College

Ortiz, Elaine .......................................................... Computer and Network Specialist
A.S., Heald College, School of Technology

Peters, Peggy .......................................................... Admissions/Records Assistant I
A.A., Contra Costa College

Powers, Brian .......................................................... Athletic Trainer
B.S., Cal State Univ., Sacramento; M.A., Saint Mary’s College

Purizaga Orejuela, Kenny ........................................ Alternative Media Specialist
A.A., Contra Costa College

Quezon, Roberto .................................................... Inventory and Receiving Clerk
A.S., Heald College

Ramos, Diwa ......................................................... Math Laboratory Coordinator
B.S., Univ of the Philippines; Master of Education, Bowie State Univ

Raumer, Rodney ...................................................... Computer and Network Specialist
A.A., A.S., Contra Costa College

Robertson, Beth .................................................... Senior Office Assistant
B.S., Grambling State Univ

Robertson, Leetha .................................................. Senior Payroll Clerk

Rodriguez, Faidra .................................................. Financial Aid Assistant II
B.S., A.S., Contra Costa College
Rodriguez, Melina ................................................................. Administrative Secretary
A.A., Los Medanos College

Rogers, Carole ........................................................................... Counselor Assistant
A.A., Los Medanos College; B.A., Univ of Cal, Berkeley
Sanchez, Eric .............................................................................. Instructional Assistant
M.F.A., Cal State Univ, East Bay; M.F.A., San Francisco State Univ

Sanders, Tara Dale ................................................................. Community & Educational Partnership Liaison
B.A., Univ of Redlands, M.A., Cal State Univ Chico

Salas, Juliana .............................................................................. Parking Services Officer
Saw, Eng ..................................................................................... Web Applications Specialist

B.S., Loma Linda Univ; B.S., Cal State Univ, San Bernardino; M.S., Cal State Univ, Fullerton

Schall, John .............................................................................. Media Design Specialist
B.A., San Jose State University; B.F.A., California College of the Arts

Scheier, Robin ........................................................................... PBX Operator-Receptionist

Simmons, Yvette ..................................................................... Grounds Worker/Gardener II

Smith, Michael ...................................................................... Lead Gardener

Smith, Jeanie ........................................................................ Sr. Computer & Network Technician
A.A., San Jose State University

Snelling, Jr., John .................................................................. Lead Account Clerk
B.A., San Jose State University

Sobolik, Glenn ........................................................................ Lead Maintenance Mechanic

Soto, Annica ............................................................................ Admissions/Records Assistant II

Spagnol, James ..................................................................... Book Buyer
B.A., San Jose State University

Stahl, Crystal ......................................................................... Administrative Secretary
A.A., Los Medanos College

Stanton, Karen .......................................................................... Computer Center Technician II
A.A., A.S., Los Medanos College

A.A., Los Medanos College; B.S., M.S., Univ of Phoenix

Starkie, Ann ........................................................................... Student Services and Instructional Support Coordinator - UMOJA

Terstegge, Ted ...................................................................... Police Services Officer
A.A., Diablo Valley College

Tiscareno, John ................................................................... Reprographics Production Coordinator
Tiscareno, Spring .................................................................. Lead Custodian

Tutt, Arvella ........................................................................ Reprographics Production Coordinator
A.A., Diablo Valley College

Valetka, Steven ........................................................................ Custodian II

Villegas, Grace ....................................................................... Scheduling Specialist
Vu, Johnny ................................................................................ Custodian II

Wagner, Gilbert ...................................................................... Custodian II

Webb, Leticia ......................................................................... Instructional Assistant
A.A., Los Medanos College

West, Michael ...................................................................... Senior Administrative Assistant

West, Paul ............................................................................ Science Laboratory Coordinator
B.S., Univ of Massachusetts at Amherst

West, Shondra ........................................................................ Grounds Worker/Gardener II

A.A., Contra Costa College; B.A., Cal State Univ, East Bay; M.A. Argosy Univ

White, Andre ........................................................................ Grounds Worker/Gardener II

Xavier, Gilberta ...................................................................... Custodian II

Xavier, Gilberta

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.
# Phone Directory

**PITTSBURG CAMPUS**

- **Admissions & Records Office**: SS3-301, 473-7500
- **Assessment Center**: SS3-314, 473-7431
- **Athletics**: 473-7605
- **Bookstore**: CC3-810, 473-7543
- **Brentwood Center**: 513-1625
- **C.A.R.E. Program**: SS4-414, 473-7481
- **CalWORKs**: SS4-414, 473-7482
- **Career Services**: SS4-435, 473-7535
- **Cashier’s Office and Payments**: SS3-308, 473-7502
- **Center for Academic Support**: CO-300, 473-7590
- **Child Study Center**: 473-7640
- **Cooperative Work Experience**: 473-7415
- **Education (CWEE)**: 473-7417
- **Counseling Appointments**: SS4-433, 473-7449
- **Disabled Students Programs & Services (DSPS)**
  - Learning/Physical: SS3-321, 473-7471
  - TDD: 439-5709
- **Extended Opportunity Programs & Services (EOPS)**: SS4-414, 473-7480/473-7483
- **Financial Aid**: SS3-309, 473-7525
- **Foundation Office**: 473-7317
- **Library Services**: L-100, 473-7570/473-7575
- **Lost and Found**: 473-7332
- **New Student Orientations**: SS3-320, 473-7434
- **Police Services**: CC1-132, 473-7332
  - Emergency Line: 473-3333
- **Scholarship Information**: SS3-309, 473-7518
- **Student Government/Activities**: GA Building, 473-7552
- **Student Outreach**: SS3-320, 473-7430
- **Transfer & Career Services**: SS4-435, 473-7444
  - Employment Center
    - On-Campus Job Placement: 473-7515
- **Veterans Benefits**: SS3-301, 473-7496
- **Welcome Center**: SS3-331, 473-7439
- **Welcome Desk**: SS3-320, 473-7434

**BRENTWOOD CENTER**

- **TDD**: (925) 439-5709

## DEPARTMENT ROOM PHONE

### INSTRUCTIONAL LABS

- Appliance: 473-7737
- Art: 473-7819
- Automotive: 473-7738
- Biology: 473-7695
- Business: 473-7787
- Computer: 473-7788
- Electrical & Instrumentation Technology (ETEC): 473-7726
- Journalism: 473-7827/473-7830
- Math Tutorial: 473-7662/473-7665
- MIDI (Music): 473-7805

### STUDENT SERVICES DEANS’ OFFICES

- Dean of Counseling & Student Support: 473-7426
- Dean of Student Success and Senior Dean of Student Services: 473-7424

Visit www.losmedanos.edu/directory for individual employees.
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 institution in which 4-year institution 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, and math. Required for all associate degrees. 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 a student may take other than one that is required for a particular major or degree to reach a total of the units required to graduate.

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 (Interssegmental 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 unsatisfactory (“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 a bachelor’s degree at a four-year institution. 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.

www.losmedanos.edu 271
Los Medanos College Locations

PITTSBURG CAMPUS
2700 East Leland Road
Pittsburg, California
(925) 439-2181

BRENTWOOD CENTER
101A Sand Creek Road
Brentwood, California
(925) 513-1625

VISIT US
www.losmedanos.edu

Use this QR code to access the maps link using your smart phone.
LMC’S
STUDENT SERVICES CENTER
Our one-stop service center - BUILT FOR YOUR SUCCESS

SS3
Student Services Level 3
Admissions & Records
Assessment Center
Cashier
DSPS
Financial Aid
Information Center
Welcome Center

SS4
Student Services Level 4
Counseling
EOPS/CARE/CalWORKs
Transfer & Career Services

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.
For more information visit www.losmedanos.edu/maps
# Index

## A
- About the College 8
- Academic Renewal 21
- Admission 9
- Administration of Justice 69
- Advanced Placement (AP) 18
- Anthropology 75
- Appliance Service Technology 78
- Art 84
- Assessment Center 28
- Associate Degree Requirements 63
- Athletics 95
- Attendance 13
- Automotive Technology 98

## B
- Biological Science 103
- Bookstore 28
- Board of Governor’s Grant Fee Waiver (BOGW) 25
- Business 105
- Business Services Office 29

## C
- Career Services 29
- Center for Academic Support 34
- Certificate of Achievement Requirements 58
- Certificate Offerings 61
- Chemistry 117
- Child Care Services 34
- Child Development 119
- Clubs 33
- Code of Conduct 39
- Communication Studies 128
- Computer Lab 35
- Computer Science 130
- Cooperative Work Experience Education 35
- Counseling Services 29
- Course Offerings 67-260
- Credit Accepted 17
- Credit by Examination 17
- CSU General Education Requirements 54

## D
- Degree Offerings 61
- Disabled Students Program & Services 30
- Drama 141

## E
- Electrical/Instrumentation Technology 147
- Eligibility Requirements 9
- Emergency Medical Services 153
- Enrollment 10
- Enrollment Fee 22
- Engineering 155
- English 158
- English as a Second Language 164
- EOPS 30

## F
- Fees 22
- Fee Refund Policy 23
- Final Grades 14
- Financial Aid 24
- Financial Aid Appeals Process 26
- Fire Technology 168
- Food Service 31
- Freedom of Association 37

## G
- Gay and Lesbian Resource Center 32
- General Education Philosophy and Student Learning Outcomes 59
- Requirements for Associate Degree 63
- Glossary 271
- Grading 14
- Graduation Requirements 58
- Grievance/Complaint Process 39

## H
- Health Services Referral 31
- High School Credit 20
- History 174
- Honors Program 35

## I
- IGETC: Intersegmental General Education Transfer Curriculum 55
- Index 276
- InSite and InSite Mail 31
- Instructional Services 34-36
- International Students 10

## J
- Journalism 180

## K
- Kinesiology 185

## L
- Liberal Arts 189
- Library 36

## M
- Major Program Requirements 67-260
- Management and Supervision 192
- Maps 274-275
- Mathematics 195
- Math Lab 36
- Matriculation and Course Enrollment 10
- Matriculation Rights and Responsibilities 37
- MESA Program 36
- Mission Statement 8
- Music 200

## N
- Non-Discrimination Policy 12
- Nursing 210

## P
- Parking Regulations & Enforcement 32
- Parking Fees 23
- Pathways to an Associate Degree 62
- Phone Directory 270
- Physical Education 222
- Physics 227
- Police Services 32
- Prerequisites/Advisories 11
- Process Technology 231
- Probation and Dismissal 16
- Program Student Learning Outcomes 67-260
- Programs of Study 61
- Psychology 235
- Puente Program 37

## R
- Real Estate 237
- Recording Arts 239
- Refund Policy 23
- Repeating a Course 20
- Residency Status 10

## S
- Satisfactory Academic Progress (SAP) 26
- Sign Language 243
- Smoking Policy 46
- Social Science 245
- Sociology 246
- Standards of Scholarship 13
- Student Code of Conduct 39
- Student Life 32
- Student Discipline & Suspension 39
- Student Government 33
- Student Learning Outcomes 67-260
- Student Records Privacy Law 47
- Student Rights & Responsibilities 37
- Student Services 27-34
- Suspension 39

## T
- Transcript Requests 21
- Transfer Programs & Services 33
- Transfer Information 49
- Travel Marketing 251
- Tutoring Services 34

## U
- Umoja Scholars 37
- Units of Credits, Guidelines on 65
- Understanding Course Descriptions 64

## V
- Veterans Benefits 24

## W
- Welding Technology 256
- World Languages 260