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<th>May 2009</th>
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<td><strong>SUMMER TERM 2009</strong></td>
<td><strong>FALL SEMESTER 2009</strong></td>
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<td><strong>September 13</strong></td>
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<td><strong>December 14-19</strong></td>
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<td><strong>S</strong></td>
<td><strong>Last Day of Summer</strong></td>
<td><strong>S</strong></td>
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<td><strong>S</strong></td>
<td><strong>Last Day of Fall Instruction</strong></td>
<td><strong>T</strong></td>
</tr>
</tbody>
</table>

**LEGEND**
- 4: Classes in session, Offices open
- 19: No classes, college offices open.
- 20: Classes in session, College offices closed.
- 1: College closed.
- 27: Final examinations.
- 28: First day of the term
- 30: Last Day of the Term
Vision

As the first choice for educational excellence in our community, MODesto JuNiOR CoLLeGE will enrich lives by challenging all students to become successful, lifelong learners who strengthen their community in a diverse and changing world.

Mission

MODesto JuNiOR CoLLeGE provides a comprehensive student-centered learning community for all who can benefit by offering innovative instructional and student support programs that respond to the educational needs of our diverse community.

We fulfill this mission as an institution of higher education through:

- University Transfer Education
- General Education
- Career & Technical Education
- Basic Skills Education
- Workforce Development
- Civic Engagement
- Comprehensive Student Services
- Community Education
- Partnerships with the Community
- Economic Development

Values

Excellence

We value and encourage innovation, creativity and commitment in achieving and sustaining a quality educational environment through continuous improvement.

Inclusiveness

We value others and ourselves as unique individuals and celebrate both our commonalities and differences. We promote open communication, ongoing collaboration and the free exchange of ideas.

Integrity

We value mutual respect, honor the dignity of each individual and foster a civil and ethical environment.

Learning

We value learning as a lifelong process and strive to adapt and be responsive to new challenges and opportunities.

Stewardship

We value social responsibility and hold ourselves accountable for the efficient and effective use of the human, physical and fiscal resources entrusted to us.
Welcome to Modesto Junior College!

Education is essential to individual success, and we are excited that you have chosen Modesto Junior College to begin your college journey! The faculty, staff, and administrators welcome you to MJC. We are the largest higher education institution in Stanislaus County and the college of first choice to many for over 87 years.

At MJC, students experience a wide array of day, evening, and weekend courses leading to certificates of achievement, associate degrees, lower division transfer and programs of general interest that total over 1800 courses and 180 degrees/certificates. We are a comprehensive college with excellent programs, uniquely talented faculty and a complete array of support services. As a result we have one of the largest transfer rates in our region.

MJC is a student centered institution. Student learning is the highest priority for our faculty and staff. The college has a distinguished heritage of providing educational excellence to our community. MJC provides extensive collegiate and co-curricular experiences for students to participate in activities like men’s and women’s intercollegiate athletics, theater, music and performing arts, agricultural science, Honors Program, Civic Engagement film series, Modesto Area Partners in Science lecturers and more.

As you review the catalog, take note of the many student services on campus that can assist you in being a successful student, such as counseling, Educational Opportunities & Services, Financial Aid, tutoring, computer labs, Writing Center, Math Drop-In Center, the Library, Career and Transfer Center and much more. The college counselor at the point of entry will assist you in determining an educational goal and developing both short and long term educational plans. I encourage you to take advantage of these opportunities.

Again, thank you for selecting MJC as your college of first choice! It is time to get connected and start the adventure. We are dedicated to making this an enjoyable journey.

Dr. Richard Rose
President
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Yosemite Community College District

Board of Trustees

Desirree Abshire
Oakdale, Trustee Area 2

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Modesto, Trustee Area 5

Pat Dean
Sonora, Trustee Area 1

Mike Riley
Modesto, Trustee Area 5

Anne DeMartini
Patterson, Trustee Area 4

Abe Rojas
Turlock, Trustee Area 3

Linda Flores
Modesto, Trustee Area 5

Tony Vasquez
Student Trustee (through May 2009)

District Administration

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Chancellor

Teresa Scott
Executive Vice Chancellor

Diane Wirth
Vice Chancellor, Human Resources

Nick Stavrianoudakis
Director of External Affairs

Tim Nesmith
Director of Facilities Planning and Operations

Gina Rose
Assistant Chancellor, Information Technology

Modesto Junior College

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President

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Dean of Community Education and Economic Development

Dr. Karen Walters Dunlap
Vice President, Instruction

Dr. Tobin Clarke
Dean of Library, Learning Resources & Technology

Dr. Robert E. Nadell
Vice President, Student Services

George Railey
Dean of Instructional Services

Derek Waring
Dean of Student Services

John Martinez
Dean of Special Programs

Susie Agostini
Dean of Matriculation, Admissions, and Records

(For Deans of Academic Divisions, see pages 87–169.)
Overview of Modesto Junior College

Everything you need to know about MJC
History of Modesto Junior College

Modesto Junior College, one of the oldest community colleges in the state, was organized in 1921 to serve the first junior college district established under a State Legislature Enabling Act.

Modesto Junior College was established to meet the needs of the community. Today the college strives to maintain the same objective—that of dedication and service to the community.

The College began with a charter enrollment of 61 students. Through the years registration has increased until today more than 18,000 day and evening students are enrolled. In addition, more than 9,000 community participants take advantage of the ever-growing Community Education program.

To complement student growth, the campus has grown as well. The college holds the distinction of having erected the first junior college classroom building in the state. From this modest beginning, MJC has grown until it now provides an outstanding learning environment on two sites: the original MJC-East on College Avenue and MJC-West on Blue Gum Avenue northwest of Modesto. In addition to the two sites, more than 20 community sites are used to meet particular educational needs.

The area boundaries have also changed. In 1964, by action of the electorate, the boundaries were enlarged to include nearly 4,000 square miles, encompassing high school districts in Stanislaus and Tuolumne Counties, the Ripon High School District in San Joaquin County, the Gustine and Hilmar High School Districts in Merced County and the Harney Elementary School District in Santa Clara County. The district also includes the Bret Harte Union High School District, the former Copperopolis Elementary School District and the former Salt Spring Valley Elementary School District in Calaveras County.

A Board of Trustees was elected in 1964 to govern the affairs of the expanded district. In 1965 the name Yosemite Junior College District was selected. It was later changed to Yosemite Community College District.

The Yosemite Community College District also includes Columbia College, located in Columbia, California.

Accreditation

Modesto Junior College is accredited by the Western Association of Schools and Colleges and approved by the State Department of Education for training veterans. MJC is authorized under Federal law to enroll non-immigrant, alien students.

Students who complete appropriate lower-division courses are given full credit on transfer to the California State Universities, the University of California, and other four-year colleges and universities which maintain articulation agreements with the college.

MJC: A Comprehensive Community College

Consistent with its philosophy of serving the educational needs of all people who reside in the area served by the College, a wide range of programs and individual courses has been developed.

Credit and non-credit courses are offered day and evening as well as on Saturdays on the college sites and at locations throughout the college district. Some courses are also offered online and on video or via video-streaming. Credit courses fulfill requirements leading to degrees, diplomas and certificates. Non-credit courses are designed for members of the community who wish to develop or improve their skills and supplement their general knowledge. These courses do not fulfill requirements leading to degrees, diplomas or certificates.

Community Education classes, tours and trips are participant fee-funded and carry no unit value. Such classes may be offered in the areas of vocational, recreational, and in-service training interests of the participants.

Open Enrollment at MJC

Unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be 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 Chapter II, Division 2, part VI, Title 5 of the California Administrative Code, 51820-51823.

Exception to this policy will be made where health, safety, legal requirements, or the facility is a limiting factor in the conduct of the course. Students denied enrollment by this policy may appeal to the Vice President for Student Services.
About MJC Students

In compliance with the Student-Right-to-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of the Yosemite Community College District and Modesto Junior College to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2003, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a three-year period. Their completion and transfer rates are listed below. These rates do not represent the success rates of the entire student population at Modesto Junior College, nor do they account for student outcomes occurring after this three-year tracking period.

**Completion Rate:** 29.4%
**Transfer Rate:** 8.4%

*Fall 2003 - Spring 2006 COHORT Data*

Based on the cohort defined above, a Completer is a student who attained a certificate or degree or became “transfer prepared” during a three-year period, from Fall 2003 to Spring 2006. Students who have completed 56 transferable units with a GPA of 2.0 or better are considered “transfer prepared.” Students who transferred to another post-secondary institution prior to attaining a degree, certificate, or becoming “transfer prepared” during a five-semester period, from Spring 2004 to Spring 2006, are transfer students. *(Updated 1/2008).*
Office of Instruction
Karen Walters Dunlap, PhD
Vice President of Instruction

Morris Memorial Building, 205 B
(209) 575-6058
FAX: (209) 575-6050

George Railey
Dean of Instructional Services
Sierra Hall 248B
(209) 575-7820

Ruth Cranley
MJC Articulation Officer
(209) 575-6713

Support Staff
Becki Scharffer, Executive Secretary
Melissa Beach, Administrative Secretary
Alejandra Cordova, Publications Specialist
Sean Fornelli, Program Representative I
Vicki Groff, Instruction Office Technician
Letitia Senechal, Curriculum Specialist

Office of Instruction

The Office of Instruction oversees all teaching and learning activities at Modesto Junior College. It also provides an array of services to students and the college overall. Students may visit the office to request review of Petition Appeals, or find out information about Study Abroad programs. The Office of Instruction also stores and monitors all course outlines, educational program requirements, and the implementation thereof, in addition to producing the College Catalog and Schedule of Classes. College-to-college course articulation, including establishing transferability and general education patterns, is also managed through the Office of Instruction.

A Comprehensive Curriculum

The college offers courses designed to meet many diverse interests, educational needs, and vocational needs of its students. College programs are designed to meet particular needs and may consist of one course or a series of courses leading to a certificate, an Associate's degree, and many MJC courses can apply towards the first two years of a Bachelor's degree.

Courses in art, literature, humanities, foreign languages, music, drama and speech provide cultural enrichment for MJC students and the community. Music instruction, for example, is offered for beginners as well as for those who already have a high level of proficiency. Performances by such groups as the Masterworks Chorus and Jazz Ensemble are examples of the cultural events offered to the community. All students are encouraged to participate in college community activities such as student government, athletics, speech, debate teams, art shows, music programs, journalism, and tutoring.

Those who wish to broaden their horizons and to become more aware of themselves and the world about them will be drawn to offerings in health education, consumer education, psychology, child development, sociology, speech, conservation, valley plant life, science, art appreciation, and physical activities. Agricultural offerings include technician training courses as well as courses designed for persons anticipating employment or already employed in the field of agriculture. An advisory committee also serves the community services program. Business courses which meet occupational requirements of the community are offered in office administration, clerical training, accounting, computer science, computer graphics applications, and business operations. Certificate programs are available in several areas. Administration of Justice, emergency service instruction, fire science, are also offered and can lead to an Associate's degree.

Vocational programs prepare students for entry employment in such fields as allied health, animal husbandry, crop production, agricultural mechanics, office administration, computer science, computer graphics applications (desktop publishing and microcomputer graphics), printing, automotive technology, electronics, nursing, machine shop, vocational accounting, human services, engineering technology, dental assisting, and broadcasting. Advisory committees serve the college in the development of vocational programs by helping to determine the need for and the content of occupationally oriented courses. Industrial technology programs are available in apprenticeship and technical fields. Courses are geared to the needs of industry and are modified as community needs change.

Other courses are designed to assist the individual in skills development. These include, among others, reading improvement, effective study skills, listening improvement, career awareness, job employment skills, introduction to mathematics, and pre-algebra. English as a Second Language is offered for non-native speakers of English who desire to learn English or to improve their proficiency.

Each year several hundred students transfer to four-year colleges and universities to continue their education toward Bachelors' degrees. Modesto Junior College has earned a strong reputation statewide for its lower division preparation. Students who properly plan courses of study in their major and general education requirements are able to continue into their junior year in most majors with no loss of time or credit.
Types of Degrees Offered

ASSOCIATE’S DEGREE
Modesto Junior College awards Associate in Arts or Associate in Science degrees upon completion of a set program of study, usually done in two years (fulltime), although completion time may exceed two years. The program of study includes coursework in a major or area of emphasis, as well as completion of general education. At Modesto Junior College, students must complete the associate’s degree requirements, including a minimum of 60 units with at least a 2.0 grade point average. Some students plan to end their education with an Associate’s degree while others plan to transfer to universities to earn Bachelors, Masters, and/or Doctorate Degrees.

Other MJC Awards
Modesto Junior College offers certificates and awards in the technical, applied, and business sciences to students who complete courses specified for each program. The curriculum is developed by faculty in cooperation with advisory committees comprised of business and industry representatives. Modesto Junior College offers three types of awards to recognize completion of technical programs and/or courses:

- Certificate of Achievement
- Skills Recognition Award
- Subject Mastery

CERTIFICATE OF ACHIEVEMENT
Certificates of Achievement are granted for the completion of a specified program. These state-approved certificates acknowledge workplace competencies and job readiness. Specific course requirements for each certificate are listed with the program descriptions in the Catalog.

MJC certificate of achievement programs range in units from 18-60 and are offered in many areas such as agriculture, supervisory training, real estate, fire science, dental and medical assisting. Students should apply for their certificates during the semester in which they are completing their final program requirements.

SKILLS RECOGNITION AWARD
Skills Recognition Awards are granted for the completion of a specified program whose total requirement is between 6 and 17 units. These locally approved programs are offered by community colleges to provide training needed in the community. Students should apply for their awards during the semester in which they are completing their final program requirements. Because these programs are locally approved and not State approved, these awards do not appear on official student transcripts.

SUBJECT MASTERY
Many individual courses and, sometimes multiple courses, are designed to culminate with a special subject award for students who successfully complete the course(s). Courses that provide CPR training, smog training, or typing are examples of classes that could result in the student earning proof of competency. Because these programs do not meet the state requirements for programs, these awards do not appear on official student transcripts, and instructors provide the proof of competency (subject award) when the class ends.

LIBERAL STUDIES PROGRAM
Each four-year institution has unique admission and teacher preparation requirements. Modesto Junior College has worked closely with CSU Stanislaus to craft the Associate of Arts degree in University Preparation with emphasis in Liberal Studies. By following the guidelines for this degree, found on page 177 of this catalog, the student can confidently follow the guidance provided by CSU Stanislaus for their teacher preparation program. Students are encouraged to consult with an MJC counselor and check www.assist.org prior to selecting courses within each category to determine the best possible preparation for each individual person. Students should also consult with a counselor and www.assist.org to determine recommended courses for admission to universities other than CSU Stanislaus.

About the MJC Curriculum

CATALOG RIGHTS
Catalog rights refer to the right of every continuing student to choose one, and only one, catalog under whose course requirements the student is to be evaluated for the purpose of determining whether the student meets the requirements for MJC graduation, Certification or for certification of General Education. The continuing student may select the catalog which was in effect when the student initially enrolled at LACC or any catalog in effect thereafter through and including the semester when the student petitions for graduation or transfer certification (adapted from LA City College Catalog)

A student remaining in continuous enrollment will retain catalog rights for graduation under the year of initial enrollment. Any academic record symbol entered on a transcript (A through F, CR/NC, P/NP, I, W) shall constitute a record of continuous enrollment. Continuous enrollment is defined as earning college credit for enrollment in at least one term (Summer, Fall or Spring) of the academic year. The college is currently reviewing the policy governing catalog rights. Students should consult with their counselor for current information. For evaluation purposes, the college will use the terms listed in the catalog’s Academic Calendar to determine a student’s catalog rights.

Program Rights for Allied Health Awards
The curricula of the Allied Health programs are prescribed by their respective accrediting bodies. For this reason, programs may be required to modify their curriculum. Students entering these programs are given academic program rights to the requirements which appear in the catalog corresponding to the term/year in which they enroll in the first semester core curriculum of the program.

CATALOG INFORMATION
The courses, degrees, certificates, and patterns listed in this catalog constitute the curriculum of the college. The college reserves the right to add, delete, or change any existing course or program throughout the year. The listing of a course in the catalog does not constitute a commitment to offer that course during the year.

ACADEMIC FREEDOM AT MJC
Students have the right to listen, the right to decide, the right to choose, the right to reject and the right to express and defend individual beliefs. As members of the MJC community, students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth.

The educational purpose of the college is best served by this freedom of expression. Students are free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of
opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Student performance will be evaluated on a broad academic basis, not on opinions or conduct in matters unrelated to academic standards.

**COURSE OUTLINES OF RECORD**

All courses at MJC are governed by a course outline which includes but is not limited to the course objectives, content, methods of evaluation, and teaching methods. All course sections, though varying in specific content and character, must include at the minimum the objectives, content and standards specified in the course outline. To obtain a copy of the official course outline for an MJC course, visit the MJC Instruction Office, Morris, 205E.

**COURSE EXAMINATIONS AND ASSESSMENTS**

Examinations or evaluations will be conducted as indicated in the course outline. A final examination or evaluation will be held during the scheduled final examination period at the end of the semester unless otherwise authorized by the President or designee.

### Course Numbering at MJC

<table>
<thead>
<tr>
<th>Course Numbering at MJC</th>
<th>Description</th>
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<tbody>
<tr>
<td>1 - 49</td>
<td>Non-degree courses. (Students who completed courses numbered 1 - 49 prior to Fall 1989 may use these courses towards a degree.)</td>
</tr>
<tr>
<td>50 - 99</td>
<td>Courses certified for Associate's degree credit.</td>
</tr>
<tr>
<td>100 - 199</td>
<td>Courses certified as appropriate for Baccalaureate or Associate's degree credit.*</td>
</tr>
<tr>
<td>200 - 299</td>
<td>Vocational courses certified as appropriate for Baccalaureate or Associate's degree credit.*</td>
</tr>
<tr>
<td>300 - 399</td>
<td>Associate's degree credit vocational courses.</td>
</tr>
<tr>
<td>500 - 599</td>
<td>Contract Instruction. (Non-degree applicable)</td>
</tr>
<tr>
<td>700 - 799</td>
<td>Fee-Funded courses. (Non-degree applicable)</td>
</tr>
<tr>
<td>800 - 899</td>
<td>Non-credit courses. (Non-degree applicable)</td>
</tr>
<tr>
<td>900 - 999</td>
<td>Basic education. (Non-degree applicable)</td>
</tr>
</tbody>
</table>

*All certified courses (courses numbered 100-299) are accepted by the California State University System. A list of courses transferable to the University of California is available in the Counseling or Career Transfer Center, or at www.assist.org.

### Types of Courses Offered at MJC

**SPECIAL TOPICS AND PROBLEMS COURSES**

Courses dealing with special topics and problems are offered with the course number of 198, 298 or 398. Each discipline may offer a special topic or problem course. The course title in the schedule of classes will identify the topic. Such courses allow participation in discussion, analysis and evaluation of a special topic or problem in a specific area of study. Topics are announced each semester in the schedule of classes. The courses are variable in hours per week and number of weeks according to the topic. The unit value may be ½, 1, 2, or 3. The course may be repeated. Field trips may be required. (CSU and UC grant credit for courses in this category contingent upon a review of the course outline.)

**INDEPENDENT STUDY AND SPECIAL PROBLEMS**

Modesto Junior College offers the traditional types of independent study course (numbered 199, 299 or 399). Independent study is supervised study, projects, or laboratory practice in any area sufficiently specific to permit the student to report or demonstrate its value beyond that possible to achieve within the standard curriculum. The unit value may range from 1 to 6, and a student may repeat an independent study course in a specific discipline to a maximum of 6 units. Field trips may be required. Interested students should contact an instructor or division dean for more information.

The transfer student should consider the policy of the four-year college or university regarding the number of independent study units which may be earned each semester. (CSU and UC grant credit for courses in this category contingent upon a review of the course outline.)

### Transferability of MJC Courses

**HECCC: PARTNERS FOR ACADEMIC EXCELLENCE**

The Higher Education Consortium of Central California (HECCC), established in 1981, is a partnership of two universities and four community colleges committed to the advancement of academic excellence in a distinctly diverse region. Through dynamic and evolving collaborations, member institutions combine resources, share intellectual capital, facilitate innovative projects, promote professional development, and increase equitable access to higher education. HECCC members include California State University, Stanislaus; Merced College; San Joaquin Delta College, University of California, Merced; and the Yosemite Community College District, which includes Modesto Junior College and Columbia College.

HECCC Equivalency Grids exist to aid students in understanding the value of their coursework between participating institutions. For more information, click hccc.deltacollege.org. Pull down the Articulation & Transfer tab to view the grids.

**RECIPIROCITY OF GENERAL EDUCATION REQUIREMENTS**

General Education (GE) breadth courses that have been completed and certified at Columbia College, Merced College, or San Joaquin Delta College in fulfillment of a GE category for an Associate of Arts or Associate of Science degree will be accepted in lieu of the corresponding GE category requirement at MJC and, therefore, satisfy that requirement.

**ARTICULATION OF COURSES BETWEEN INSTITUTIONS**

When the word “articulation” is used in education, it often has different meanings and connotations depending on the setting. Articulation at MJC refers to courses and the process of developing a formal, written and published agreement that identifies courses (or sequences of courses) on the MJC campus that are comparable or acceptable in lieu of specific requirements at another campus, often called the “transfer” or “target institution.” Successful completion of an articulated course assures the student and the faculty that the student has taken the appropriate course, received the necessary instruction and preparation, and that similar outcomes can be assured enabling progression to the next level of instruction at the transfer institution.
Community and Economic Development

The Community and Economic Development Division provides innovative educational programs and services through the following units: Community Education, the Workforce Training Center, the Modesto Institute for Continued Learning (MICL), Early College/2+2, the Regional Fire Training Center and the Center of Excellence. Dean, George Boodrookas, (209) 575-6714.

Workforce Training Center

WEST CAMPUS: El Capitan Center
Phone: (209) 575-6386 FAX: (209) 575-6943
Email: boodrookasg@mjc.edu Website: www.mjc.edu/wtc
Hours: M-Th 8:00 AM – 5:00 PM F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

The Modesto Junior College Workforce Training Center assists the college in reaching its mission of enhancing economic development and lifelong learning in our community through the following programmatic areas: Corporate Training & Corporate College, Service-Learning through Americorps, International Contract Programs, and training assistance through CalWorks and the Workforce Investment Act.

Corporate Training & Corporate College

Customized training and performance consulting services are provided at low cost for all sizes of businesses, government agencies and nonprofits. Customized curriculum, organizational development, supervisory training, business plan development, cost reduction strategies, and return on investment evaluations are all offered at competitive pricing by a well respected local provider of training services. Manufacturing customized training includes state-of-the-art accelerated courses in PLC Troubleshooting, Adjustable Frequency Drives, Industrial Controls, Forklift Training, and much more. Company focused degree and certificate programs are also offered on a fee-for-service basis at the company’s site. Call for additional information.

Service Learning Through Americorps

The Workforce Training Center promotes service-learning opportunities to 140 MJC students through the AmeriCorps National Service program. There are two AmeriCorps programs on campus. The Foster Youth Mentoring Program serves foster youth (ages 14-21), assisting them with independent living skills to help prepare them for emancipation. The Math & Literacy Tutoring Program serves elementary school (K-6) children in academic programs throughout Stanislaus County.

CalWorks & Workforce Investment Act

The Workforce Training Center is a key provider of services to welfare recipients and unemployed/dislocated workers. Services include: customized training, GED preparation, work experience, job retention training, and specialized vocational training.

International Contract Programs

Phone: (209) 575-6392 or (209) 575-6795
Email: elizabeth@mjc.edu

The International Contract Programs Unit coordinates grant funds which provide international education programs to visiting scholars and business persons. Currently, MJC subcontracts with the Center for Intercultural Education and Development (CIED) at Georgetown University which administers funds received from United States Agency for International Development (USAID) to provide degree programs to the participants of the Cooperative Association of States for Scholarships (CASS) Program from Central America, Mexico, and the Caribbean. This unit also contracts with the Japan Agricultural Exchange Council (JAEC) to provide short term training to agriculture students from Japan.

Community Education

EAST CAMPUS: Morris Building, 204
Phone: (209) 575-6063 FAX: (209) 575-6025
Email: mjccommunityed@mjc.edu
Website: www.mjc.edu/communityed
Hours: M-Th 8:00 AM – 6:00 PM F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

The Community Education unit at Modesto Junior College offers fully fee-funded, not-for-credit offerings for all ages. Educational travel, recreational classes, occupational training programs, on-line training sessions, older adult offerings and the Modesto Institute for Continued Learning (MICL) are some of the diverse educational offerings delivered through Community Education.

To better serve the needs of the entire community, Community Education is planning to increase the number of classes held off-campus. Please contact the office and find out how to become a Community Education site. To receive a copy of the published schedule, please call 575-6063 or visit the Community Education website at: www.mjc.edu/communityed.

Center of Excellence

Stanislaus County Alliance (1010 10th Street, Modesto)
Phone: (209) 567-4943 Email: marquezm@mjc.edu
Website: www.cccwd.net
Hours: M-F 8:00am – 5:00pm
Summer Hours: M-F 8:00am – 5:00pm

MJC hosts one of nine, regionally-based Centers of Excellence as part of the California Community Colleges Economic and Workforce Development Program. These Centers conduct environmental scanning on high growth, emerging, and economically-critical industries and their related workforce and occupational needs. Information from the scans is intended to assist the strategic planning and decision-making efforts of regional colleges in addressing local and regional workforce needs. The Centers also support regional and statewide marketing activities to increase employer awareness of the economic development services available from community colleges. The Central Region Center of Excellence serves the entire San Joaquin Valley Region of California.
THE MJC FOUNDATION AND YOU!

Generating Financial Support For MJC
Since 1968

• $85,000 to 139 Scholarships for Deserving Students (2007 - 2008)
• $38,000 to MJC Academic and Support Programs (2007 - 2008)

Alumni Activities - Fundraisers - Commencement - Athletic Events
Auctions - Awards Dinners - Community Events

The Foundation partners with the community to raise funds for you!
Join the team!
Contact us to learn of partnership opportunities!

“The mission of the Modesto Junior College Foundation is to generate financial support and increase community awareness for the students, programs, and activities of Modesto Junior College.”

Founded in 1921, Modesto Junior College is one of the oldest community colleges in California. We are located on the second floor of the Morris Memorial Administration Building, East Campus, Room 209.

Amy Bethel - Foundation Assistant - (209) 575-6068
Sandy DeWalt - Foundation Specialist/Alumni - (209) 575-6619
Gigi Sherriffe - Major Gift Officer/President’s Circle - (209) 575-6162
Eugene C. Hill - Executive Director - (209) 575-6156
Getting Started at MJC

How to apply, register, prepare for, and get proof of attending MJC.
Applying for Admission

Admissions Offices
Therese "Susie" Agostini
Dean of Matriculation, Admissions, and Records
(209) 575-6856

EAST CAMPUS ADMISSIONS: Student Center
Phone: (209) 575-6013
Registration Hotline: (209) 575-6853
FAX: (209) 575-6859
Hours: M-Tu 8:00 AM – 7:00 PM  W-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM  F CLOSED

WEST CAMPUS ADMISSIONS: Yosemite Hall, Room 147
Phone: (209) 575-7727
Hours: M-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM  F CLOSED

STUDENT HELP DESK: (209) 575-7800
MAILING ADDRESS:
MJC Admissions Office
435 College Avenue
Modesto, CA 95350-5800

How to Apply for Admission

Individuals who have never attended MJC must submit an Admissions Application. Students can either apply by completing an Admissions Application available in the Admissions Office or by completing an Admissions Application on the Internet at www.mjc.edu. When the application has been completed, it should be submitted either electronically, in person, or mailed directly to the Admissions Office. When the application has been processed, new students will be issued a registration date and time for the term requested, as well as provided with information regarding assessment, orientation, and advising.

Any student who has attended MJC within the past year is considered a continuing student and is, therefore, not required to complete another application. As long as a student is considered to be a continuing student, registration dates and times will automatically be assigned and will be available on PiratesNet approximately six (6) weeks prior to registration.

However, any student who once attended MJC, but not within the past year, must complete a new Admissions Application to reactivate their registration eligibility. The Admissions Application is available in the Admissions Office, as well as on the MJC website (www.mjc.edu). When the form has been processed, returning students will be issued a registration date and time for the term requested, as well as provided with information regarding assessment, orientation, and advising.

Junior high, high school, international students and students being readmitted following dismissal must follow admission requirements on the following pages.

Students should arrange to have one official transcript of all previous college and high school work mailed to the MJC Records Office. High school seniors may request their schools to send their transcripts at the close of their graduating year after their diplomas have been posted. Students who plan to use completed courses from other colleges to satisfy MJC prerequisites must have official transcripts in the MJC Records Office at least six weeks prior to their registration date.

The MJC Records Office will accept hand-carried transcripts that are in an unopened and sealed envelope from the student’s high school and/or college. Transcripts received by MJC become the property of the college and will not be returned or copied for the student.

Students who are concurrently enrolled at Columbia College and who wish to enroll at MJC should consult with the Columbia College Admissions Office. They will make arrangements with MJC for authorization. Columbia students may use Columbia College assessment scores and/or course completions to satisfy MJC assessment requirements.

Who is Eligible for Admission to MJC?

Any person who meets at least one of the following requirements is eligible to attend Modesto Junior College:

• Has graduated from an accredited high school, includes students who have received high school certificates of completion (or equivalent) but did not pass the California High School Exit Exam.
• Has passed the California High School Proficiency or the GED test.
• Is a non-high school graduate 18 years of age or older who is no longer attending high school, who is able to benefit from instruction.
• Is a 7th–12th grade student, who is at least 14 years old, who has met all established special conditions for admission as a special student pursuant to Sections 4880, 48800.5, 48802, 76001, and 76002 of the California Education Code as well as policies of Yosemite Community College District, has written permission from the high school principal (or junior high school superintendent) and parent or legal guardian.
• Is an international student who has completed admission procedures for international students.
• Non residents and undocumented students may attend, but must pay full tuition, unless they qualify for an exemption under AB 540. See “AB 540: Exemption from Non-Resident Tuition” on page 17.

Enrollment is open to all admitted students who meet applicable valid prerequisites, unless specifically exempted by statute or regulation. Every course section reported for state aid, wherever offered and maintained by the District, shall be open and fully open to enrollment and participation by any person who has been admitted to the college and who meets prerequisites established in accordance with state regulations.
California Residency Requirement

New and returning students are classified as either a California resident or a California non-resident for out-of-state tuition purposes. Residency is determined when a student applies for admission to the college. In order to determine California residency during the application process, students are sometimes required to submit copies of INS documentation or documentation showing intent to make California their permanent residence.

DEFINITION OF A NON-RESIDENT

A “non-resident” is a person who has either not resided in California for the full one-year period before the residence determination date (first day of classes for each semester) or is a person who is precluded by INS from establishing residency, regardless of length of presence in California.) Nonresident students are required to pay $190 per unit tuition, in addition to their other fees.

HOW CALIFORNIA RESIDENCY IS DETERMINED

Residency is determined by the length of physical presence in the State of California (minimum of one year and one day prior to the first day of the semester or summer session) and the “intent” to make California one’s residence. Students who have resided in California fewer than two years must prove “intent.” To prove intent, students who have lived in California fewer than two years should submit two proofs from the following list with their Admissions Application:

- Owning or renting residential property in California for personal use;
- Registering to vote in California;
- Paying California State income taxes;
- Possessing a California driver’s license or identification card;
- Registering a motor vehicle in California;
- Having an active checking and/or savings account in a California bank;
- Other proofs of intent may be considered by the college.

Aliens may establish residence if not precluded by the Immigration and Nationality Act from establishing domicile in the United States; provided that the student has had residence in California for more than one year prior to the residence determination date. Non-resident students should carefully read information regarding AB 540 that exempts non-resident tuition for non-resident students who have attended California high schools for at least three years and have graduated from a California high school. For all other unique situations, students should consult with the Admissions Office.

RESIDENCY FOR MILITARY PERSONNEL

Active duty military students and their dependents residing in California are considered California residents (except if assigned for educational purposes to state-supported institutions of higher education).

Members of the armed forces who were stationed in California on active duty for more than one year prior to being discharged from the service may be classified as a resident for up to one year if they live in California after being discharged.

RESIDENCY FOR CREDENTIALED EMPLOYEES

Credentialed employees and their dependents, migrant agricultural workers and their dependents may also be considered California residents for educational purposes.

RESIDENCY AND NON-CITIZENS

Non-citizen students, if their visa does not preclude them from establishing residency in the United States, may be classified as residents if they have resided in California more than one year and if INS documents were issued or approved more than one year prior to the beginning of the term.

Examples of INS documentation that may be requested include:

- Resident Alien Card
- Permanent Resident Card
- I-94 Form
- Visa
- Passport
- Temporary Resident Card

Students whose INS documents were issued less than one year and one day prior to the start of the semester will be considered non-residents for tuition purposes.

AB 540: EXEMPTION FROM NON-RESIDENT TUITION

Consistent with AB 540, non-resident and undocumented students who meet all of the following requirements can be exempted from paying non-resident tuition. Students who are exempted from paying non-resident tuition (pursuant to Section 68130.5 and Section 68130.7 of the California Education Code) do not become residents for eligibility purposes for any state-funded program.

Students who meet all of the following criteria will be exempted from paying non-resident tuition:
Students who are non-immigrant aliens (the most common being the F series student Visas and B series visitor visas) are not eligible for this exemption. Students can obtain the AB540 form from the MJC Admissions Office.

How to Appeal Residency Status

NEW STUDENTS

Prospective students wishing to appeal residency status requirements must first complete an Admissions Application. Once residency has been determined by the Admissions Office, students may then appeal their status in the Admissions Office by completing a Residency Consideration Form. The appeal will be reviewed by the MJC President. Appeals will be answered in writing and will be final. International students whose visas preclude establishment of residency will not be granted an appeal. For questions about residency, telephone the Registration Hotline: (209) 575-6853.

CONTINUING STUDENTS

Continuing students whose residency status may change in a future term should complete a Residency Consideration Form in the Admissions Office. Students may be asked to provide supporting documentation. With appropriate documentation, if the change status is approved, Admissions staff can make the change immediately for the future term.

Admission of 7th and 8th Grade Students

(who are at least 14 years of age)

Advanced admission is granted for academically superior 7th and 8th grade students who are at least 14 years old by the start of the semester for which they are applying. In order to be eligible to enroll in college-level courses (credit courses numbered 50 or higher), 7th-8th grade students must have met all the established special conditions set forth in the Yosemite Community College District Board Policy & Procedures, as well as California Education Code Sections 4880, 48800.3, 48802, 76001, and 76002.

The school district principal or designee must determine that the petitioner is capable of benefitting from advanced scholastic or vocational (college level) work.

Seventh-8th grade students, who are at least 14 years old by the start of the semester for which they are applying, may be determined to be eligible for advanced admission in MJC college-level courses (MJC credit courses numbered 50 or higher) if the school district of residence does not provide courses of advanced scholastic or vocational study to benefit the petitioner, and if student has submitted a Modesto Junior College Applications, a completed Petition for Advanced Admission form, a Health Consent form, a Board of Governor’s Fee Waiver form, a letter of recommendation signed by their principal, and they have demonstrated an English 101 ability on the MJC Assessment Test. All students must satisfy class prerequisites, if necessary.

Seventh-8th grade students who wish to enroll in more than 11 units must have formal approval from their school’s Board of Trustees and approval of the MJC President prior to enrollment. Enrollment fees for advanced admission students who enroll in up to 11 units will be waived. Students who are admitted as special full-time students will be required to pay their enrollment fees.

Home-study 7th-8th grade students, who are at least 14 years old by the start of the semester for which they are applying, must include with their admission packet a certification letter (Private School Affidavit) from their County Schools’ Office or the State of California. Home-study 7th-8th grade students who are at least 14 years old must also demonstrate an English 101 ability level by completing the MJC Assessment.

All seventh-eighth grade students are subject to all college regulations regarding attendance, conduct, scholarship and fee payment.Courses attempted and units earned will be recorded on the student’s permanent record and may be used toward meeting graduation, transfer, or certification requirements at Modesto Junior College. Students are expected to attend an orientation workshop before registration.

In order to be approved for a second or more semester as a concurrently enrolled junior high school student, the junior high school student who is a continuing MJC student must be in good academic standing at MJC. Good academic standing is defined as having a cumulative 2.0 or higher MJC grade point average. The number of W’s in relationship to attempted units will also be taken into consideration.

NOTE: It is expected that all 7th-8th grade students enrolling in college courses have the maturity to function effectively on a college campus. No special arrangements for additional supervision of underage students are available. College courses are designed for adult students. In a very small number of disciplines, course content may be unusually frank in order to deal with scholarly discussion of behavioral, artistic, human or other issues. Unlike K-12 schools, colleges do not contact parents in advance to inform them of these issues. Parents are hereby notified that it is their responsibility to assure that their child is able to handle the college environment, as well as the content of the courses in which the student enrolls. Parents may wish to investigate the curriculum prior to enrolling their student if they have any questions or concerns.

Admission of High School Students

Advanced admission is granted for academically superior 9th through 12th grade students, who are at least 14 years old by the start of the semester for which they are applying, and the high school principal or designee has certified that the student is prepared to undertake associate degree credit courses that are numbered 50 or higher. In order to be eligible to enroll in college-level courses (credit courses numbered 50 or higher), 9th-12th grade students must have met all the established special conditions set forth in the Yosemite Community College District Board Policy & Procedures.

The school district principal or designee must determine that the petitioner is capable of benefitting from advanced scholastic or vocational (college level) work.

High school students may be determined to be eligible for advanced admissions in MJC college-level courses (MJC credit courses numbered 50 or higher) if the school district of residence does not provide courses of advanced scholastic or vocational study to benefit the petitioner.
High School students must submit a Modesto Junior College Admissions Application, the completed Petition for Advanced Admission form, a Health Consent form and a Board of Governor’s Fee Waiver Form. All students must satisfy class prerequisites, if necessary. Upon high school graduation, each graduating senior who enrolled in MJC classes as a high school student must complete the Admissions Application again so that high school graduation information can be updated. Failure to do so will delay registration for classes. Students are expected to attend an orientation workshop before registering.

High school students admitted in this category are subject to all of the college regulations including attendance, conduct, scholarship and fee payment. Courses attempted and units earned will be recorded on the student’s permanent record and will be used toward meeting graduation, transfer, or certification requirements at Modesto Junior College. High School students who wish to enroll in more than 11 units must have formal approval from their school’s Board of Trustees and approval of the Modesto Junior College President prior to enrollment.

Enrollment fees for advanced admission students who enroll in up to 11 units will be waived. Students who are admitted as special full-time students (11.5 units or more) will be required to pay their own enrollment fees.

In the event that a high school student wishes to receive high school credit for a course taken at MJC, a student can request that transcripts be sent to the high school. Students may request transcripts in the Records Office, Morris Memorial, Room 105, during final exam week or later. Each high school will make the determination whether or not college credits can be used at the high school.

Home-study students must include with their Admissions packet a certification letter (Private School Affidavit) from their County Schools’ Office or the State of California.

In order to be approved for a second or more semester as a concurrently enrolled high school student, the high school student who is a continuing MJC student must be in good academic standing at MJC. Good academic standing is defined as having a cumulative 2.0 or higher MJC grade point average. The number of W’s in relationship to attempted units will also be taken into consideration.

NOTE: It is expected that all high school students enrolling in college courses have the maturity to function effectively on a college campus. No special arrangements for additional supervision of undergraduate students are available. College courses are designed for adult students. In a very small number of disciplines, course content may be unusually frank in order to deal with scholarly discussion of behavioral, artistic, human or other issues. Unlike K-12 schools, colleges do not contact parents in advance to inform them of these issues. Parents are hereby notified that it is their responsibility to assure that their student is able to handle the college environment, as well as the content of the courses in which the student enrolls. Parents may wish to investigate the curriculum prior to enrolling their student if they have any questions or concerns. For more information on college for students 17 and under, see also Early College Program.
Admission of Students with Bachelor’s Degrees or Higher

Students with Bachelor’s Degrees or higher will be admitted to Modesto Junior College upon submission of a completed Admission Application. Students with Bachelor’s Degrees or higher will enroll after all other priority registration dates and times have been honored, consistent with state community college guidelines.

Admission of International Students

International Student Program
Barbara St. Urbain, Coordinator/Counselor
Counseling Services Office

EAST CAMPUS: Morris Building, 103 through Counseling Services
Phone: (209) 575-6012
FAX: (209) 575-6720
Email: sturbainb@mjc.edu
Hours: M-Th 8:00 AM – 4:00 PM
Summer Hours Varied.

MAILING ADDRESS:
International Student Program
435 College Avenue
Modesto, CA 95350-5800, USA

The International Student Program provides specialized services, activities, and support to all international students attending MJC. Admissions, academic and personal counseling, orientation, immigration advising, cultural programming, International Club advising, and more are all part of this program. A special Orientation program is arranged for new students upon arrival to MJC. Students are encouraged to visit the International Counselor.

Modesto Junior College welcomes qualified international (non-immigrant) students to its academic, vocational and technical programs. The administration believes that the presence of international students enriches the academic environment for all of its students while providing a quality education for students from all parts of the world. The following is required for admission of all international, non-immigrant, applicants:

- International Student Application
- Certification of Finances
- Proof of English competency comparable to a 450 (133 computer based, 46-46 Internet based) TOEFL
- High School Graduation (official transcripts from all secondary and post-secondary institutions must be provided with English translations)
- Autobiographical essay

International students are required to pay non-resident tuition. For more information and/or application forms, contact the coordinator of the program.

Admission into Special Academic Programs

Programs such as Nursing, Respiratory Care, Medical Assisting, Dental Assisting, and the Fire Academy require special program admission in addition to regular admission to the college. This can be accomplished by submitting a completed Admission Application to the Admissions Office, and by contacting the Allied Health Division (209) 575-6362 for information about admission into Nursing, Respiratory Care, Dental Assisting, and Medical Assisting. For information about the Fire Science Academy, phone (209) 549-7028.

Admission for Students from Other California Community Colleges

YCCD Inter-District Attendance Policy

The Yosemite Community College District maintains a free exchange of students with all community college districts in the State of California. No inter-district permit is necessary to attend Modesto Junior College from any other community college district in California.

Readmission after Dismissal

A student who has been academically dismissed (see Academic Probation and Dismissal) may petition for readmission by meeting with a counselor and completing a Petition for Readmission any time after receiving notice of dismissal. Forms are available in the Counseling Center, Morris Memorial, Room 103. Petitions will be reviewed by the Dean of Counseling and Student Services, and counselors. The student may be readmitted if there is strong evidence showing promise of success.

The Dean of Counseling and Student Services, and/or the counselor, upon granting readmission to a dismissed student, may impose certain restrictions, such as unit load, periodic grade reviews, etc., which are felt to be in the best interests of the student. A readmitted student is subject to immediate dismissal should he/she fail, at any time, to meet the conditions stipulated by the Dean of Counseling and Student Services. If the petition is denied, the student may apply for readmission after one year has passed since dismissal.
**Assessment Process**

**MJC Testing Center**
- **West Campus**: Yosemite Hall, Room 147
- **Phone**: (209) 575-7728
- **Recording**: (209) 575-6026
- **Fax**: (209) 575-7776
- **Website**: [www.mjc.edu/assessment](http://www.mjc.edu/assessment)
- **Hours**: M-F 8:00 AM - 5:00 PM
- **Summer Hours**: M-Th 7:30 AM - 5:30 PM  F CLOSED

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### What is the Assessment Process?

Assessment is the process through which a student's skill level in a particular subject area is measured through standardized testing using multiple measures, for the purpose of placement into MJC courses.

### Why complete the process?

Math and English/Reading or English-as-a-second language (ESL) assessments are required of ALL STUDENTS who are completing courses for an associate degree, certificate, transfer program, job skill improvement, career development, or who are undecided; as well as students who have completed at least 15 units, regardless of their goal.

There is no pass or fail, and these tests do not determine admission to the college. The results are used to assist students in selecting the appropriate level of course work. Placement in courses is not based solely on test scores. Counselors may use test scores, high school and/or previous college transcripts, and information gained during the counseling appointment to determine course recommendations. Students are encouraged to discuss test results with a counselor prior to registration.

### How to participate in assessment

To be admitted to a test session, **a completely processed admissions application must be on file in the Admissions Office. Picture ID will be required for test admittance.** Seating in the Testing Center is determined on a first-come, first-served basis. Tests begin promptly, and students may not enter after a test has begun. Some tests (English, reading and math) are provided on the computer. For computer testing, students will be admitted to the Testing Center as computers become available. Students with disabilities who need special testing accommodations should notify Testing Center staff of their needs at least 10 days before they plan to test.

Students who may be exempt from testing (see Assessment Exemptions on the following page) are welcome to take the assessment tests and to participate in the assessment process. See “Assessment Exemptions” on page 22 for more information.

Students who are required to take assessment tests prior to registration who choose not to test must complete a Matriculation Release Form, available in the Admissions Office or in the Welcome Center. Students who do not complete required assessment testing or who do not complete a Matriculation Release Form may forfeit their registration priority date and time.

Once a student receives a placement recommendation by the college’s assessment process AND the student enrolls in the recommended course, the student may not re-test for purposes of enrolling into a higher level course. **NOTE:** Most math, English composition, ESL and science courses require assessment or prerequisite course completion.

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### Mathematics Assessment

Students can choose from four exams:
- **Level 1** - Basic Math Competency
- **Level 2** - Elementary Algebra Competency
- **Level 3** - Intermediate Algebra Competency
- **Level 4** - Precalculus Competency

In order to assist in advising, retesting on lower exams may be required of students if scores on the higher exam are significantly low. To eliminate this need, students should be sure of their appropriate math level when taking the tests. Visit the Testing Center website for examples of test questions/problems.

### English and Reading Assessment

There are two sections that make up the English/Reading exam:
- **Reading Comprehension**
- **Sentence Skills**

Students who are taking the test for English advisory purposes must take both sections. The Reading section alone will only be given to students who have previously taken the English assessment exam, or who have completed an English course, but still need a reading recommendation. Programs that have admission requirements, such as nursing, are partly satisfied by the reading assessment. Check with an advisor for other program needs.

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### ESL Assessment

**ENGLISH AS A SECOND LANGUAGE**

Students who plan to enroll in credit ESL classes must take the MJC ESL assessment test prior to registration. The assessment consists of:
- 45-minute multiple choice test;
- general information questionnaire; and
- ESL advising

Students who plan to enroll in non-credit ESL courses (ESL 901, 902, 903, 904, 905) are not required to take the ESL assessment test. Students who would like additional information about testing should visit the Testing Center or talk to a counselor.
Assessment Exemptions

Students may be exempt from testing or have satisfied the testing requirement if they:

- Have an Associate or higher degree; or
- Have taken other California community college assessment tests and have submitted test results and other information (college catalog description with course description) to MJC Records Office at least 6 weeks prior to registration date and time; or
- Have taken other college math, chemistry, English composition or ESL classes and have submitted official transcripts to the Records Office at least 6 weeks prior to registration date; or
- Are enrolling only in activity classes, apprenticeship classes, employer-required classes, personal growth/enrichment classes, classes to maintain a certificate or license, or high school equivalency or other non-credit classes only, and have completed fewer than 15 units.

Being exempt from testing does not release the student from any prerequisite requirements a course may have.

Retest Procedure

Students may retest after 60 days from the original test date. Students can, however, take different levels of the Math Assessment without waiting 60 days.

**Students may not retest if they have:**

- Completed a college or MJC English, reading or math class
- Dropped an English, reading or math class after two weeks.

Counselors will use test scores and other information to ensure that students take appropriate MJC courses. ALL students should have previous college transcripts on file in the MJC Records Office, and ALL students should discuss course selections with a counselor or advisor before registration. MJC’s assessment tests provide current skill level information that will be used in combination with transcripts and other assessment methods to plan a successful course of study.

Challenging Prerequisites

Any student may challenge a prerequisite on the grounds that:

1. It was not established in accordance with the District’s policy
2. It is in violation of Title 5
3. It is discriminatory
4. You feel that you can succeed even though you have not completed the prerequisite (it is your responsibility to provide additional documentation that demonstrates you have met the prerequisite.)
5. You will be subject to undue delay because the prerequisite has not been made reasonably available.

To challenge a prerequisite in any area, the student must begin in the division office that offers the prerequisite by completing the Prerequisite Challenge Form at least five days before registration. The student must state the grounds for the challenge and present additional information that supports the challenge. A committee will review each challenge and inform the student within five days of the filing of the petition.
Orientation and Advising

Orientation for New & Returning Students

Where: EAST CAMPUS, Student Center, Welcome Center
Website: www.mjc.edu
Phone: (209) 575-6789
FAX: (209) 575-6667
Hours: M-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

All new and returning students, including special admits (7th-12th grade students), who do not have an associate’s degree or higher and who have not previously attended an MJC college orientation or completed an MJC guidance class are required to attend orientation prior to their registration date and time. Orientation familiarizes each new MJC student with campus policies, procedures, and student rights and responsibilities. Students who are exempt from orientation are welcome to attend an orientation session. Orientation schedules are printed each semester in the MJC Schedule of Classes and online under "popular links."

Arrangements can be made for students with disabilities and limited English-speaking students who require accommodations. To make accommodations, students should contact the Welcome Center at least 10 days before they plan to attend a workshop.

Students (who are required to attend an orientation session prior to registration) who choose not to attend must complete a Matriculation Release form, available in the Admissions Office or in the Welcome Center. Students who do not complete the required orientation activity or who do not complete a Matriculation Release form may forfeit their registration priority date.

Planning Your Education with a Counselor

Counseling Services
Derek R. Waring
Dean of Counseling and Student Services
Counseling Center, Morris Memorial, 103
Tel: (209) 575-6080
FAX: (209) 575-6720
Hours: M-F 8:00 AM – 5:00 PM
Evening Hours: M-Th 5:00 pm - 7:00 PM
Summer Hours: M-Th 7:00 AM – 5:30 PM F CLOSED

Some students have already decided on their educational or career goals before entering MJC. Others are exploring different educational or career paths, and may enter MJC with an educational goal or major.

We encourage students to use MJC’s counseling, assessment, and career services to help set and reach educational and career goals. We also encourage students to build relationships with faculty who teach in their areas of interest. Faculty advisors can provide students with the information, support and guidance to help them reach their goals. Counselors and advisors are not assigned to students.

Who receives educational counseling?

All current or returning MJC students are welcome to make an appointment with a counselor. Educational counseling is required for all new students who indicate on their admissions application that they:

- Have an Associate’s degree and are pursuing another Degree, a Certificate, or transfer;
- Plan to earn an Associate’s degree;
- Plan to earn a Certificate;
- Plan to transfer to a four-year university; or
- Plan to learn job skills or prepare for career advancement.
- Are undecided about their educational and career goals.

Educational counseling is available in the Counseling Center. New students may drop-in prior to the new student’s registration date and time. Returning students may drop-in to schedule an appointment or call the Counseling Center. Students who are exempt from educational counseling are welcome to attend a counseling session.

Guidance classes

New students are encouraged to enroll in a Guidance class, taught by MJC counselors during their first semester. Guidance courses are essential to student success. In a guidance course, students learn to:

- Acquire, organize, and demonstrate problem-solving and decision-making skills;
- Explore, evaluate, and pursue career and educational options;
- Develop social, intellectual, and emotional competencies;
- Develop needed skills and strategies to maximize the educational experience;
- Understand themselves, others and their environment to enable them to develop individual value systems and life styles.

There are six Guidance (GUIDE) courses from which to choose, which also fulfill the Guidance requirement for the associate degree at MJC - Orientation for Foreign Students; Educational Planning; Career Awareness; Job Development Skills; Orientation for Re-entry Adults; Success Strategies for Transfer Students. the Early Alert.

Early Alert

MJC Counseling sponsors a program called Early Alert. This program provides intervention for students at the earliest signs of academic problems. Through Early Alert, faculty identify students enrolled in their classes who are experiencing problems and refer them electronically to a service on campus. Staff members of that service contact students for further follow-up.
What is registration?

Registration is the formal process of arranging desired courses into a program of classes and securing a seat in the classes. Students may register online at PiratesNet (www.mjc.edu) or by touchtone at (209) 549-7000, or in person in one of the two Admissions Offices on MJC’s East or West Campus at the time of their scheduled registration date/time or any time thereafter during scheduled registration.

ORDER OF PRIORITY REGISTRATION AT MJC

At MJC, the Priority Registration System (currently under review) is used to determine the order in which students will register.

1. Eligible students with disabilities, eligible EOPS students, and eligible military veterans
2. Continuing students with 99 to 0 units (includes units in progress) in descending order, and
3. Continuing students with 99.5 units or more.
4. New and returning students receive a first-come, first-served registration appointment based on the date their complete admissions application is received, except that students who participate in special matriculation programs, such as StatSmart, may register earlier than those who do not participate.
5. Students who have Bachelor Degrees or higher register after all priority registration candidates have been honored.

How to register

To register for classes, on the registration date/time provided to you, use PiratesNet at www.mjc.edu or use T-REG at (209) 549-7000. Make sure your schedule is planned and accessible.

To find out your registration date

Student registration dates and times are posted each term on PiratesNet during the following months.

<table>
<thead>
<tr>
<th>TERM</th>
<th>REGISTRATION DATES POSTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>Mid February</td>
</tr>
<tr>
<td>Fall</td>
<td>Mid May</td>
</tr>
<tr>
<td>Spring</td>
<td>Mid November</td>
</tr>
</tbody>
</table>

If you are blocked from registration

If you have, for example, forgotten to pay a fee, return a library book, musical instrument, or athletic uniform, you may be blocked from registering for classes. Such obligations to the district must be cleared before a student is permitted to register. Outstanding obligations will prevent registration and the ability to obtain verifications of enrollment, grades, academic transcripts, and degrees.

About Your Fees!

Fees are due at the time of registration.

For fee refunds on classes, the student must drop the class before published refund deadlines.

Classes that have not been dropped by the deadline will be charged to the student.

Failure to pay fees or drop unwanted classes will result in loss of services and blocks to future registration.

Failure to pay fees within 10 days of registration will result in a “frozen” schedule.

For more information, please refer to fee information on page 27

Late Registration

Late registration occurs the week prior to the start of the semester. It will be permitted on a first-come, first-served basis. Students will be able to register for classes in which there are vacancies. See current Schedule of Classes for specific information. Students may add classes during the first two weeks of the semester by attending the class and discussing add possibilities with the instructor. If seats are available and if the student has met the prerequisites (if required), the instructor may provide the student with an add card. Adds must be processed by the add deadlines which are published in the Schedule of Classes.

Wait Lists for courses

When available class seats are filled, a class is closed to further enrollment. However, students may (at the time of registration) place their name on a wait list. Students may add their name on only one wait list in a particular subject and only if they are not already enrolled in the same class (i.e. one English 101 class, one Math 90 class, etc.) Being on a wait list does not mean that the student is enrolled in the class. It means that the student is on a waiting list should additional seats become available once the class has begun.

If seats become available in classes during registration, divisions will contact students. Therefore, it is important for all students to activate their college provided email account, and to keep home mailing addresses, and phone numbers current. Each time a student registers, a screen will come up that shows the address information on file with the college. Students should review and correct any errors as instructed on PiratesNet.

When classes begin, the students who are still on the wait list should attend the first class session and talk with the instructor. If a seat is available in the class, the instructor will give the student an add card according to wait list order. Instructors will add only students who meet eligibility requirements for the class. To officially enroll in the class, the student must add the class using PiratesNet, T-REG or by bringing the add card to the Admissions Office on either campus.
Instructors will advise students regarding their chances of being added to the class and whether or not wait list students should return to subsequent class meetings.

Students who have placed themselves on an online class wait list should submit an Electronic Add-Card on the first day of class. If the instructor allows the student to add the class, he/she will email the student, providing instructions as to how to add the class online. To ensure a priority wait list number, students must complete the electronic add-card procedure.

Attendance

Attendance is important. Instructors may drop students who do not attend the first class meeting. All students enrolled at Modesto Junior College are expected to be punctual and attend classes regularly. Instructors are encouraged to announce to their students at the beginning of the semester their policies regarding excessive absences or tardiness. It is the student's responsibility to discuss with the instructor any anticipated and/or extensive absences. Tardiness may be considered an absence. No absence relieves the student of the responsibility to complete all work assigned. When an instructor determines that a student's absences are excessive, the instructor may drop the student from the class. However, it is the responsibility of the student to complete the course or to officially withdraw from the class.

Enrollment status

| CONTINUING STUDENT | has enrolled in one or more classes within the past year. 
  Registration: Continuing students are automatically assigned registration dates and times each semester. For catalog rights, continuous enrollment is defined as earning college credit for enrollment in at least one term (Summer, Fall, Spring) of the school year. |
| RETURNING STUDENT | Has not enrolled in an MJC class within the past year and has reapplied to MJC. |
| NEW STUDENT | Has never enrolled in a class at MJC and has applied to MJC. |

Determining undergraduate status

Student progress at MJC is measured by the number of units completed.

| FRESHMAN STATUS | has completed fewer than 30 units. |
| SOPHOMORE STATUS | has completed 30 or more units. |

Full Time/Part Time Enrollment

Many external agencies require verification of a student's enrollment status. At MJC, full and part time designations apply.

| FULL-TIME STUDENT | Must be registered in 12 or more units. 18 units is considered the maximum. To enroll in more than 18 units, during the spring and fall term, or more than 12 units during the summer term, approval must be obtained from the Counseling Center. |
| PART-TIME STUDENT | Registered in fewer than 12 units. |

Units required for special populations

Some students must complete a specific number of units each term.

| VETERANS: CHAPTER 31 | As required by veterans Administration Counselor |
| VETERANS: CHAPTERS 30, 32, 35, 1606 | Minimum 12 units required for assistance |
| VETERANS: SOCIAL SECURITY BENEFITS | Minimum 12 units required |
| INTERNATIONAL STUDENTS | Minimum 12 units required |
| STUDENT BODY OFFICERS | Minimum 9 units required, in addition to a 2.3 GPA. |
| VARSITY ATHLETES | Minimum 12 units at all times; of the 12 credit units, at least 9 shall be attempted in courses counting towards the Associate’s degree, remediation, transfer, and/or certification. To be eligible for the second season of a sport, the student athlete must complete and pass 24 semester units between seasons of competition and, of the 24 semester units to be completed, eighteen (18) semester units shall be in course work counting toward the Associate’s degree, remediation, transfer, and/or certification. The student athlete must also maintain at least a 2.0 grade point average at all times. |

Prerequisites and Registration

PREREQUISITE POLICY

Modesto Junior College requires satisfactory completion of all prerequisite courses prior to the student enrolling in the subsequent course, except that a student may enroll in the next level pending the outcome of the prerequisite course if the student is currently enrolled. “Satisfactory completion” means a grade of A, B, C, or CR/P (pass). Grades of D, F, or NC/NP do not qualify as meeting prerequisites.

CHALLENGING PREREQUISITES

Any student may challenge a prerequisite on the grounds that:

1. It was not established in accordance with the District’s policy
2. It is in violation of Title 5
3. It is discriminatory
4. You feel that you can succeed even though you have not completed the prerequisite. (It is your responsibility to provide additional documentation that demonstrates you have met the prerequisite.)
5. You will be subject to undue delay because the prerequisite has not been made reasonably available.
To challenge a prerequisite in any area, the student must begin in the division office that offers the prerequisite by completing the Prerequisite Challenge Form at least five days before registration. The student must state the grounds for the challenge and present additional information that supports the challenge. A committee will review each challenge and inform the student within five days of the filing of the petition.

**MJC Email Accounts for Students**

MJC is making every effort to communicate with students by sending correspondence through a district-provided student email system. We advise new students to set up their email accounts as soon as they are admitted to the college and that all students check their email often. Information sent to students by the college will often be time-sensitive.

Students may access email using PiratesNet. Students are advised to set up their district email account as soon as they are admitted to MJC. Student email accounts will be 5 gigabytes in size with a 10 megabyte attachment limit. Students may use this account to easily send and receive messages, manage calendars, and track contacts. This email account is web-based and can be accessed from any computer with an Internet connection.

It is each student’s responsibility to activate their PiratesLink connection now. For more information, point your browser to www.yosemite.edu/student email.

**Auditing Courses**

East Campus: Admissions Office, East Campus Student Center
Phone: (209) 575-6013
Registration Hotline: (209) 575-6853
FAX: (209) 575-6859
Hours: M-Tu 8:00 AM – 7:00 PM  W-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM  F CLOSED

WEST CAMPUS: Yosemite Hall, Room 147
Phone: (209) 575-7727
Hours: M-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM  F CLOSED

Persons who have met the limit of repetition for credit courses as stated in the catalog may audit the course with approval of the instructor. Auditors receive no credit for class work, no grade, and no record is kept of their performance in class. Enrollment is allowed after the first day of instruction on a ‘seats available’ basis. An Audit Enrollment Form can be obtained in the Admissions Office after staff verify that the repeat limit has been reached. This form must be signed by the instructor and the student and turned in to the Admissions Office along with a payment of $15.00 per unit paid to the Business Office. Students enrolled in ten (10) or more units at the time audit enrollment occurs will not be assessed the audit fee for up to three (3) units.

**Withdrawing from Courses**

Students are responsible for officially dropping classes. Even if an instructor promises to drop a student, **the student is responsible for officially dropping the class.** Withdrawals may be processed using PiratesNet (www.mjc.edu) or touchtone registration at (209) 549-7000, or in the Admissions Office by completing a drop form. See the MJC Schedule of Classes for published drop dates. Each student’s printed schedule (available on PiratesNet) includes course drop dates.

Students who do not officially drop a class may receive an “F” in the class. Students may drop classes during published times (see current Class Schedule) using PiratesNet or Touchtone Registration or by submitting a Drop Form to the Admissions Office.

- If a student drops a full-term course within the first four weeks of the semester, no notation will be recorded on the student’s permanent record.
- If a student drops a full-term class from the end of the fourth week through the 12th week (or by 75% of the class, whichever is less) a grade of “W” will be recorded.
- A student cannot withdraw from class after the published drop deadline.
- For short-term class deadlines, students should refer to their class schedule.

A student is responsible to pay all fees according to written regulations. An **A student who enrolls in a course and fails to pay fees is responsible for all outstanding debts to the college.** Future services and registration will be denied until full payment has been made.

Once the deadline to withdraw from class(es) has passed (75% of a class’ duration), neither a student nor an instructor may request a withdrawal. However, a student may petition to withdraw after the deadline based upon extenuating circumstances, such as illness or hospitalization. Petition forms are available at the Office of Student Success, the Library Basement, Room 20.

**MILITARY WITHDRAWAL**

A student called for active duty may receive a military withdrawal at any time during the semester. Military withdrawals will not be factored into progress probation. To drop classes using a military withdrawal option, the student must submit a copy of military activation papers along with a drop form for each class to the Admissions Office.
Student Fees and Expenses

**Business Services**

**EAST CAMPUS: Student Center**
- Regular hours: M-Th 8:00 a.m. - 5:00 p.m.
  - F 8:00 a.m. - 4:30 p.m.
- Summer Hours: M-Th 7:30 a.m. - 5:30 p.m.

**WEST CAMPUS: Yosemite Hall A133**
- Regular hours: M-Th 8:00 a.m. - 11:30 a.m.
  - 12:00 p.m. - 4:00 p.m.
- F 8:00 a.m. - 12:00 p.m.
- Summer hours: CLOSED (April 28-August 24)

**Enrollment Fee:** California residents must pay an enrollment fee of $20 per unit per semester (subject to change by the California State Legislature). Enrollment fees may be waived for students who qualify for the Board of Governors Grant Fee Waiver Program and for those who enroll in Apprenticeship courses only. Dependents of service-connected disabled or service-connected deceased veterans may be eligible for a waiver of fees. Please contact the campus Veteran’s Office in Morris Memorial Building room 104 for assistance. For fee waiver information students should contact the Financial Aid Office in Yosemite Hall.

Special part-time students are students who are concurrently enrolled in K-12th grade and who enroll in fewer than 12 units at a community college. They are exempt from paying the enrollment fee. To be eligible to enroll in courses, special part-time students must be prepared to undertake college-level work and must be approved by the student’s high school principal and parent or legal guardian. At MJC, special part-time students must be at least 14 years of age. Special part-time students may enroll in a maximum of 11 units per semester.

**Non-Resident Tuition:** A U.S. citizen who is not a legal resident of California and all others who are classified as non-residents are required to pay a non-resident tuition fee of $181 per unit per semester. The international student tuition fee is $181 per unit per semester. The tuition fee is in addition to the Enrollment Fee and all other required fees.

**Health Fee:** A $16 Health Fee must be paid each semester ($13 Summer) by students who enroll in a credit course that is longer than 16 hours, held on campus or off-campus within the district, or those enrolled in non-credit courses held on campus, or those enrolled in on-campus contract education courses. The Health Fee may be waived for students who are indentured apprentices enrolled in Apprenticeship classes only, or for those who depend exclusively on prayer for healing, with approval of the Vice President, Student Services.

Per Education Code Section 76355, fee subject to change by $1 based on the Implicit Price Index for State and Local Government Agencies.

**Student Center Fee:** Students voted in Spring 2000 to assess a Student Center fee of $1.00 per unit to a maximum of $10.00 per academic year, to establish an annual building/operating fund for the West Campus Student Center.

**Student Representation Fee:** A $1 fee established by two-thirds vote of the student body. Money collected will be used by ASMJC to represent student concerns at local, state, and federal government levels. Students may refuse to pay the fee for religious, political, financial, or moral reasons. A refusal to pay the fee must be submitted in writing to the Business Services Office.

**Student Benefits Fee:** Payment gives you automatic membership in ASMJC (Associated Students of Modesto Junior College) and discounts (see ‘MJC ID Card and Activities Sticker’ on page 56). This optional $5.00 fee is automatically assessed. You may refuse to pay this fee by completing the Student Benefit Fee Waiver form available in the Business Office, or PiratesNet under Online Forms.

**Parking Fee:** Student parking permits are available for $20 a semester or $1 per day. (Summer term is $7.50.) Motorcycle fee is $7.50 per semester. The parking fee is not required for disabled students with a disabled DMV placard. Parking permits must be picked up in person. Picture ID is required. Shuttle parking permit is also available for $10 per semester. Students who purchase an auto permit for the semester and have proof of a motorcycle license are eligible for a free motorcycle permit for the same semester.

**Debts To The College:** Any individual who has incurred, but not paid, a debt to the college may be denied grades, transcripts, degrees, some services, and registration privileges.

**Materials Fees:** This serves as payment for required instructional and other materials which are of continuing value to the student outside of the classroom setting and which the student must procure or possess as a condition of registration, enrollment, or entry into a class; or any material which is necessary to achieve the required objectives of a course.

**Other Expenses:** Textbooks, stationery and supplies will amount to approximately $200 to $600 per semester.

**Transcript Verification:** The first two transcripts are provided free. A fee of $5 per transcript is charged after the first two, payable at the time of the request. A $10 fee is charged for 24-hour transcript service, and a $20 fee is charged for on-the-spot transcript service.

**Enrollment Verification:** The first two verifications are provided free. A fee of $3 per verification is charged after the first two, payable at the time of the request. A $10 fee is charged for next day service and a $20 dollar fee is charged for same-day service. No charge is made for loan deferment or financial aid GPA verifications.

**Course Audit Fee:** A fee of $15 per unit is required of students who have met the repetitions limit for credit courses, payable at the MJC Business Services Offices. Students enrolled in 10 or more units at the time audit enrollment occurs will not be assessed the fee for up to 3 units. See ‘Auditing Courses’ on page 26.

**Other Authorized Fees:** Fines for overdue library books or other equipment and parking fines are among special charges authorized by the Board of Trustees.

**Field Trip Fees:** Appropriate fees will be charged for those field trips scheduled to destinations outside California and for some long distance field trips outside the Yosemite Community College District.
Refund Policy
Class(es) must be dropped at the Admissions Office, online at www.mjc.edu, or by touchtone phone at (209) 549-7000 on or before published deadline dates prior to requesting a refund.

The Parking Fee is refundable only if class is dropped by the last business day before class begins, and if the parking permit is returned prior to the first day of the term. Parking permits paid for and not picked up will only be refunded during the refund-filing period.

1. Drop Deadlines to be eligible for a refund - Class(es) must be dropped during the first two weeks of the term, except for short-term classes. Short-term classes must be dropped by the 10% point of the length of a class with the exception of those classes that have either five or fewer meeting days or meet 20 or fewer hours. In these cases, the last refund date is defined as the day before the first class meeting. If the last day in any of these periods falls on a weekend or holiday, the final drop date is the preceding college business day.

2. Refund Request Form - A Refund Request Form (available in the Business Services Office, online at www.mjc.edu, the Admissions Office, and the current schedule of classes) must be filed in the MJC Business Services Office by the end of the eighth week of the term, except for short-term classes. The refund request must be filed within two weeks of the drop date.

3. In accordance with the California Code of Regulations, Section 58508, refunds with an enrollment credit of at least $10.00 will be assessed a $10.00 administrative processing fee.

4. Classes canceled by the College - Refunds are made for classes canceled by the college, but refunds ARE NOT AUTOMATIC. The student must submit a completed Refund Request Form to the Business Office.

Eligible refunds are processed approximately six (6) weeks after the term begins or four (4) weeks from the filing date, whichever is later. If fees or tuition were paid by check, the refund is not made until the check has cleared the bank.

1. Outstanding Credit - Credit for which a refund has not been filed as specified in (2) above will not be refunded. Continuing students with an outstanding credit can carry this credit for two academic years, where such credit is then applied against fees and charges. ANY CREDITS REMAINING AT THE END OF TWO ACADEMIC YEARS, HOWEVER, ARE FORFEITTED.

Denial of Services and Debts Owed to the College
Students who have debts to the college or “holds” for administrative reasons on their student records may find that services are withheld until the debt is paid or the hold is removed.

Services that will be withheld because of debts to the college or holds include: counseling/advising services, registration, release of diplomas and certificates, release of transcripts, enrollment verifications, and release of grades.

Debts occur when a student fails to repay money borrowed from the college, violates a student financial aid contract, fails to pay tuition and/or registration fees, library fines, bookstore merchandise, fails to reimburse the college for an “insufficient funds” check or for a disapproved credit card transaction, fails to return or account for athletic uniforms and equipment, or fails to pay scheduled fees for other services provided by the college.

Modesto Junior College reserves the right to withhold all further services until the debt is paid. Grades and transcripts will be withheld until all obligations are cleared.

NOTE: Fees are subject to change through State Legislation and Governing Board implementation as judged to be in the best interest of the California Community Colleges and the students at Modesto Junior College.

Community Education Refunds
Community Education and Fee-Funded Classes: A full (100%) refund will be given for classes, trips, tours and other activities which are full at the time registration is received or those that the college finds necessary to cancel. Refund requests for classes/seminars must be received by the Community Education Office at least seven (7) working days prior to the first meeting. For trips/tours, refund advance notice must be given within the following guidelines:

- One-day excursion: 7 days
- Pre-purchased tickets included: 30 days
- Overnight accommodations included: 45 days

No refunds are issued after a class, seminar, trip, or tour has started. All student-requested refunds are subject to a $20 processing fee.

Parking
The District and College provides parking facilities for vehicles for the sole purpose of conducting college business. Please see “Parking” on page 37 for more information on parking at MJC.
Modesto Junior College administers a comprehensive student financial aid program designed to assist students in meeting college costs. The amount of financial aid awarded varies from student to student, depending on the individual's need and resources. Funds are awarded on a first-come, first-served basis.

Financial aid awards are based on calculated financial need as determined by the Free Application for Federal Student Aid (FAFSA). Students may apply online at www.fafsa.ed.gov. Application assistance is available in the Financial Aid Office in Yosemite Hall 147.

All applications for financial assistance programs; i.e., student loans, work compensation, grants, scholarships, special funds, subsidies, prizes, etc., will be considered by Modesto Junior College without regard to race, color, national origin, gender or disability.

Standards for Satisfactory Academic Progress

Financial aid recipients must adhere to satisfactory academic progress standards — maintain a minimum 2.0 cumulative GPA and complete at least 67% of all attempted courses.

Students' satisfactory academic progress will be reviewed once each academic year at the end of the spring semester or upon the students' initial application for financial aid, whichever comes first.

Withdrawals, Incompletes, and/or Units Not Counted:

Grades of F, NP, IP, I, and RD are not counted as satisfactory academic progress and will not be counted toward total units completed. Bridged classes or open-entry/open-exit classes (IP) will be counted as eligible units for financial aid only during the first semester the class is attempted.

Probation/Disqualification Status

Students who have not met all satisfactory academic progress standards will be placed on Financial Aid Probation and should meet with a counselor to complete or update an Educational Plan, and attend a Financial Aid Satisfactory Academic Progress Workshop. Failure to do so could result in loss of financial aid.

Students who have not met all satisfactory academic progress standards at the end of the probationary period will be placed on Financial Aid Disqualification. This status will remain in effect until all requirements for satisfactory academic progress are achieved. Students must notify the Financial Aid Office to request reinstatement once these standards are met. Under no circumstances will students be paid retroactively for any ineligible semesters.

Appeals

Unusual or mitigating circumstances may warrant special consideration of a disqualified student's individual situation. An appeal form is available on the website, at www.mjc.edu/financialaid or in the Financial Aid Office and must be filed if such a review is desired. Allowable conditions for consideration may include:

- Student illness or death in immediate family
- Family stress
- Medical or emotional disability
- Other, for which student can demonstrate good cause

In order for a petition to be considered, students must submit an Appeal form, a current Educational Plan, and any supporting documentation to the Financial Aid Director. If approved, a letter will be sent to the student, which will clearly identify the conditions for reinstatement and continued financial aid eligibility. Students whose appeal has been denied may contact the Financial Aid Office to schedule an appointment to meet with the Financial Aid Appeals Committee. The decision of the Financial Aid Appeals Committee is final.

Determining Eligibility for Federal Aid

To be eligible for federal aid, students must:

- be a U.S. citizen or eligible non-citizen
- be registered with the Selective Service, if applicable
- be enrolled in an eligible program leading to a certificate, degree, or transfer program at MJC
- have a high school diploma or equivalent, or pass an “Ability-to-Benefit” test prior to receipt of Federal funds
- have “financial need” as determined through the application process
- not owe a refund on a Federal grant or be in default on a Federal education loan
- be making satisfactory academic progress.

Funding Limitations

Funding from financial aid resources at Modesto Junior College is limited to 90 attempted units and/or completion of a college degree. Students exceeding these limits may file an appeal if extenuating circumstances have prevented them from completing their program within these limitations. Appeal forms are available on the website at www.mjc.edu/financialaid and in the Financial Aid Office. Students are required to complete the forms and meet with a counselor.

A student who has appealed and been denied may contact the Financial Aid Office.
FINANCIAL AID

Aid Office to schedule an appointment to meet with the Financial Aid Appeals Committee. The decision of the Financial Aid Appeals Committee is final.

ELIGIBLE PROGRAMS/COURSES
Students must be enrolled in an approved course of study leading to degree, certificate, or transfer to a four-year institution.

RETURN OF TITLE IV FUNDS
Per federal regulations, any student who receives financial aid and then withdraws from all classes prior to completing 60% of the semester/program and/or course will be required to repay a portion of any unearned federal financial aid. If the student has received more than earned, notification will be sent as to the amount of aid to be returned, the due date, and the procedure. If the student has not yet received the full amount earned, notification will be sent regarding a post-withdrawal disbursement the student may receive, the response date, and the procedure.

Federal regulations only allow students to receive financial aid for classes they actually attend. Students who receive financial aid for classes they drop before the first day of class or that they otherwise never attended must return those funds.

There is no appeal process. Federal regulations do not allow a college to make any exceptions to the Return of Title IV requirements. Students who do not repay the funds owed are disqualified from eligibility for federal student aid at any college or university.

Students considering dropping classes should first consult with the Financial Aid Office to understand the implications of a complete withdrawal.

FEDERAL PELL GRANT
The Federal Pell Grant provides federal grants to eligible students to help meet college expenses. Students must file a FAFSA and have financial need as determined by a formula that is applied uniformly to all applicants throughout the nation. The Financial Aid Office calculates the actual award amount depending upon the financial information the student reports on the application, whether the student is enrolled full-time or part-time and the cost of education.

ACADEMIC COMPETITIVENESS GRANT
The Academic Competitiveness Grant is a federal grant that provides up to $750 for the first year of undergraduate study and up to $1,300 for the second year of undergraduate study to full-time students who are eligible for a federal Pell Grant and who successfully complete a rigorous high school program, as determined by the state or local education agency and recognized by the Secretary of Education. Second year students must maintain a cumulative grade point average (GPA) of at least 3.0.

To be eligible for the Academic Competitiveness Grant, students must:

- be a U.S. citizen
- be a Federal Pell Grant Recipient
- be enrolled full-time in a degree program
- be enrolled in the first or second academic year of his or her program of study at a two-year or four-year degree-granting institution
- have completed a rigorous secondary school program of study if a first-year student, not have been previously enrolled in an undergraduate program, and
- if a second-year student, have at least a cumulative 3.0 grade point average on a 4.0 scale for the first academic year

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (FSEOG)
These federal grants are designed to assist students with exceptional financial need by supplementing other financial aid sources.

FEDERAL WORK-STUDY PROGRAM (FWS)
Federal Work Study provides part-time employment for students who demonstrate financial need. The Financial Aid Office will assist in placing students in jobs on campus or at off-campus non-profit agencies, as available. Students must not work until an official agreement is on file with the Financial Aid Office and may not work more than 20 hours per week, except during weeks that school is not in session. Current pay is $8.00 per hour. Work-study hourly wages are paid directly to the student to help with educational expenses.

NURSING STUDENT LOANS
Nursing Student Loans may be available to students in the Associate’s degree Nursing Program who demonstrate financial need. Loans range from $1,000 to $3,000 per academic year.

NOTE: MJC does not participate in any Direct Loan or Federal Family Loan Program.

BUREAU OF INDIAN AFFAIRS GRANTS (BIA)
Bureau of Indian Affairs Grants are provided to help eligible Native American students. Contact your Tribal Agency or the Financial Aid Office for more information.
State Financial Aid Programs

**BOARD OF GOVERNOR’S FEE WAIVER PROGRAM (BOGW)**

The BOGW waives the enrollment fee for eligible students. The BOGW is effective for an entire academic year (Summer/Fall/Spring). There is no minimum unit requirement. Students may apply by filling out the fee waiver application; however, Modesto Junior College encourages students to use the FAFSA application as they may qualify for other additional aid.

**CAL GRANTS**

Cal Grants are state-funded grants, which are awarded to eligible students to help meet college expenses. Students must file a FAFSA application and submit a GPA Verification Form. The application-filing deadline is March 2nd preceding the award year. A second deadline of September 2nd is available for students on a competitive basis who are planning to attend a community college during the award year.

**Cal Grant A** assists with tuition and fees for California residents at qualifying institutions offering baccalaureate degree programs. Awards may be held in reserve while attending a community college. There are two types of Cal Grant A awards – Entitlement and Competitive. Every current or previous year high school senior who has at least a 3.0 GPA, meets the financial and academic requirements and applies on time (March 2nd deadline) will receive a Cal Grant A Entitlement award. Other eligible students who have at least a 3.0 GPA may apply for a Cal Grant A Competitive award. Selections are based on a composite score that considers family income, parents’ educational level, GPA, time out of high school, single-family household, and former foster youth.

**Cal Grant B** provides a living allowance and tuition and fee assistance for low-income students. Beginning with the sophomore year, this award also helps pay tuition and fees at a qualifying institution offering baccalaureate degree programs. There are two types of Cal Grant B awards – Entitlement and Competitive. Current or previous year high school seniors with at least a 2.0 GPA who meet the financial and eligibility requirements and apply on time (March 2nd deadline) will receive a Cal Grant B Entitlement award. Other eligible students with at least a 2.0 GPA may apply for a Cal Grant B Competitive award. Selection is based on a composite score based on family income, parents’ educational level, GPA, time out of high school, single-parent household and former foster youth.

**Cal Grant C** provides assistance with costs for occupational and vocational programs. Selections are based on financial need, vocational aptitude and enrollment in an eligible program at a California community or independent college or vocational school that is at least four months long. Additional information may be obtained in the MJC Financial Aid Office.

**CALIFORNIA CHAFEE GRANT**

The Chafee Grant Program awards grants of up to $5,000 annually to foster youth and former foster youth to use for college courses or vocational school training. To be eligible the applicant must have been in foster care between their 16th-18th birthdays and be no more than 22 years old. The applicant must also file a FAFSA, available at www.fafsa.ed.gov as well as the California Chafee Grant Program Application, available at www.csac.ca.gov. Recipients must be enrolled at least half-time.

Scholarships at MJC

The Modesto Junior College Scholarship Program offers over 150 scholarships annually to eligible students in amounts ranging from $200 to $2,000. Incoming, continuing and students transferring to four-year colleges are encouraged to apply for scholarships at MJC. Funded by the MJC Foundation, private donors, community agencies and businesses, the scholarships are intended to help students achieve their educational goals.

Applicants must have a minimum grade point average of 3.0 and plan to attend full time. The scholarship application will be available beginning October 1, 2008 with the priority deadline being December 12th, 2008. The application period will encompass new-incoming, continuing, and transfer students. The deadline for current high school seniors who will be new-incoming freshmen at MJC is March 13, 2009. Students should contact the Scholarship Office for information on applying for scholarships once the deadline has passed. Check with the Scholarship Office located in Yosemite Hall 151 for specific dates and deadlines, or by calling (209) 575-7715.
Incomplete Grades

An Incomplete (I) grade will be given only in cases in which course work could not be completed because of illness or for a cause judged unavoidable by the instructor. Failure to complete regular course work by the end of the semester will not be reason for giving an Incomplete (I) grade. When a faculty member approves an (I) Incomplete grade, he or she will issue an incomplete and the in-lieu grade that will be recorded if the student does not make up the work in the allotted time.

Faculty will determine the amount of time that a student may have to make up the work, but in no event shall it exceed one year.

Faculty will submit to the Records Office a written record of the conditions for removal of the (I) grade and the grade to be assigned if the work is not completed. A copy of this record will be mailed to the student.

When the student has completed the course work, the faculty member will go to the Records Office and record the appropriate grade and sign the written record in the rollbook.

If the student has not completed the conditions for removal, the Incomplete grade (I) will be changed on the expiration date to the "grade in lieu of removal" assigned by the faculty member for the "I" grade.

Satisfactory Completion

"Satisfactory completion of" a course means that the student has earned a letter grade of A, B, C, P/CR. All prerequisite courses at MJC must be satisfactorily completed in order to enroll in a course which requires the prerequisite.

P/NP (Pass/No Pass)

A student may enroll in most courses with the option of one of two grading systems: (1) letter grade (A-F) or (2) Pass/No Pass (P/NP), formerly (CR/NC). The student must elect the P/NP option no later than the first 30% point of the class. The deadline to file P/NP forms in the Admissions Office is the preceding business day. (Forms are available in the Admissions Office or online at www.mjc.edu.) Unless otherwise stated by "GR'' or (P/NP), all courses are offered with a choice of letter grade or P/NP option.

Because transfer institutions often do not accept P/NP grades in a student’s major, the college recommends that courses in the major be taken for a letter grade.

Instructors are required to give all students who complete the course a letter grade (A-F), regardless of student choice, unless the course is offered only for P/NP grading.

None of the units attempted under the P/NP grading option are used in computing the student’s grade point average. However, units attempted

Grading and Credit Policies

MJC Grading System

Grades are assigned by instructors based on classwork and tests. Grades are assigned as follows:

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DEFINITION</th>
<th>GRADE POINTS PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>P, CR</td>
<td>Pass, at least satisfactory: Comparable to A, B, C (units not counted in GPA)</td>
<td></td>
</tr>
<tr>
<td>NP, NC</td>
<td>No Pass, less than, satisfactory or failing D, F (units not counted in GPA)</td>
<td></td>
</tr>
<tr>
<td>IA, IB, IC, ID, IF, ICR, INC</td>
<td>Incomplete (units not counted in GPA)</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn:</td>
<td>(units not counted in GPA)</td>
</tr>
</tbody>
</table>

Challenging Grades

To conform to the provision of Section 55760(a) of the California Administrative Code, Title 5, the determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency.

Modesto Junior College procedures for challenging a final grade are as follows:

1. **There shall be a two year time limit for challenging any evaluative or non-evaluative symbol.** This limit will begin at the end of the session in which the symbol was assigned.

2. The correction of grades given in error shall include expunging the incorrect grade from the record.

Students should complete the appropriate forms to challenge academic record symbols which are available in the Office of Student Success, Library Basement room 20.
for which (NP) is recorded are counted in determining progress probation and progress dismissal.

Fourteen units of P/NP may be used toward graduation. An evaluation on a “P/NP” basis may not later be changed to a letter grade, nor may the reverse occur. (Section 55752 Title V, Effective Spring 1985.)

CAUTION: Some schools may consider “NP” the same as “F”.

Improvement of Grades

Beginning with the Summer 2004 term, courses in which substandard grades of “D”, “F”, or “No Pass” were earned may be repeated only once. Students will be blocked from registering a third time for the same course if two substandard grades (D, F, or NP) have been recorded in previous grading periods. A student who wishes to enroll in a course for a third time will need to complete a Request for Third Enrollment Form with a counselor. Third enrollment petitions are available in the Counseling Office in Morris Memorial 103 and must be filed no later than the end of the first week of that term in which the class is to be repeated.

When a course in which a D grade was received is repeated, the student will receive the new grade and grade points earned but will receive no additional units for the course.

When a course in which an F, W, or NP grade was received is repeated, the student will be given both the units and grade points earned.

Courses in which the student has earned a C or better (including P) may not be repeated for improvement of grade.

Grade Point Average (GPA)

To graduate and to transfer to other collegiate institutions, the student must have at least a C average (2.0), based on the total grade points earned divided by the total number of units attempted. Students planning to transfer to a four-year university should check with a Counselor.

A course or unit attempted is any course or unit which in any semester appears on the official transcript. Courses with an Incomplete (I grade), a Withdrawal (W grade), Pass (P grade) Credit/No Credit (CR/NC), or No Pass (NP grade) do not count in the grade point average. All other credit courses attempted are included in the average.

Academic Probation and Dismissal

A student shall be placed on academic probation if he or she has attempted a minimum of 12 semester units of work and has a grade point average of less than 2.0 ("C").

A student who is on academic probation shall be subject to dismissal for one calendar year if the student has earned a cumulative grade point average of less than 2.0 in all units attempted in each of three (3) consecutive semesters.

A student on academic probation shall be removed from probation when the student’s accumulated grade point average is 2.0 or higher.

(For information on Readmission after Dismissal, see p. 20.)

Academic Distinctions

GOOD STANDING
A student is in good standing academically when the grade point average is 2.0, a C average, or better, and the student has completed at least 50% of courses attempted.

GRADUATION WITH HONORS
Graduating students achieving a cumulative grade point average of 3.5 or higher in all degree-applicable coursework, including transfer work, will graduate with honors. This honor will be indicated on the transcript and the diploma.

(For information on Readmission after Dismissal, see p. 20.)
Academic Renewal Regulation

Modesto Junior College regulations permit the removal of work completed at MJC which is substandard and not reflective of a student’s present scholastic ability and level of performance. The grades so removed will be disregarded in the computation of grade point averages.

1. Substandard work completed at MJC (grades of “D,” “F,” and/or “NC”) may be removed from a maximum of two terms under the following conditions:
   a. A period of at least two years has elapsed since the work to be removed was completed.
   b. The work to be removed does not include courses previously used to establish eligibility for transfer, graduation, or certificates of achievement.
   c. A repeated course that has resulted in a satisfactory grade cannot be removed.
   d. The student has completed at MJC or another accredited college, since the work to be removed was completed, at least 15 semester units with at least a 3.0 GPA, 30 semester units with at least a 2.5 GPA, or 45 semester units with at least a 2.0 GPA.
   e. The terms need not be consecutive.
   f. If satisfactory course work has been completed in a semester where unsatisfactory course work has also been completed, the student can elect to have only the unsatisfactory course work removed.

Students wishing to use the academic renewal procedure should submit an application for academic renewal. Applications are available in Morris Building, Room 107.

When work is removed under (1) above, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a complete academic history.

EXEMPTIONS FROM REMEDIAL LIMIT

The following students will be exempt from the limit:

- Students enrolled in one or more courses of English as a Second Language.
- Students identified by a college in the district as having a learning disability.

Students may be granted a waiver to the limitation upon petition to a college in the district. Waivers will be granted only when the student shows significant and measurable progress toward the development of skills necessary for college-level courses. Such waivers will be given only for a specified period of time or for a specified number of units.

Students who are blocked from enrollment because of excessive remedial units should contact the Counseling Center, Morris, Room 103.

Acceptance of Credit from Other Institutions

Lower division credit will be accepted from institutions listed as accredited by accrediting bodies that MJC recognizes, or if the institution is listed as a candidate for accreditation in the publication “Accredited Institutions of Higher Education” (provided the institution offering the courses accepts them towards its own degree.)

Veterans and reservists who have completed basic training will receive three units of Health Education credit and two units of Physical Education credit upon presentation of their separation papers. Credit for military schools will be granted if recommended in “Guide to the Evaluation of Educational Experiences in the Armed Services.” Credit for USAFI courses will be granted if appropriate (18 units maximum).

Modesto Junior College does not evaluate international transcripts. The Records Office in Morris Building, Room 105 has a list of companies that provide the service for students. The Evaluations Office will only consider lower division courses recommended by the service which are subsequently approved by the MJC division offering the course. The request forms for these companies can be picked up in the Evaluations Office, Morris Building, Room 107. The cost of the evaluation is the responsibility of the student.

In accordance with District policy, official college transcripts received by MJC will be evaluated for college credit. Transcripts received become the property of MJC.

Credit Earned from the 2+2 Program

While in high school, students can complete specific courses that will allow them to earn MJC credit. Such courses are part of the 2+2 program. Students who successfully complete approved 2+2 articulated high school courses with a grade of B or higher and enroll at MJC in a fall or spring semester following high school graduation will receive college credit(s). Please note: The 2+2 articulation agreement between the high school institution and MJC may require the student to meet special conditions beyond those required of passing with a B grade to receive the college credit. Special conditions exist for Agriculture, Foreign Language, and Mathematics courses.

WHILE IN A HIGH SCHOOL 2+2 COURSE

1. At the beginning of a 2+2 course the student will complete a Request to Participate in 2+2 program for that course from the high school instructor.
2. The instructor of the course sends the completed forms to the Early College/Tech Prep 2+2 program at MJC, where student information is input in a database that tracks students participating in 2+2 courses.

3. After the course is completed and the grade is earned, students earning B grades or higher will receive photocopies of 2+2 certificates at the mailing address specified on the Request to Participate form. The original certificate stays on file at MJC in the Early College program office.

4. Certificates will be active and cross-referenced with information in the MJC Records Office (Morris Memorial, Room 105) for a maximum of two years following the date of high school graduation.

UPON ENROLLING AT MJC AFTER GRADUATION

1. If a student meets all conditions specified in the course’s 2+2 Articulation Agreement, the grade earned in the high school course will be posted on the student’s MJC transcript the beginning of the second semester of enrollment at MJC.

2. Students receive college credit for approved high school courses in which a grade of B or higher was earned. They receive the letter grade earned in high school on their MJC transcript.

Earning Credit by Examination

A student may petition for “credit by examination” in appropriate courses as determined by the Academic Division or area, provided the student has evidence of training and/or experience in that subject area. Students may take the exam one time only.

TO BE ELIGIBLE FOR CREDIT BY EXAMINATION

A student must be in good standing as evidenced by:

1. registration in other Modesto Junior College credit course(s) at the time the course is challenged.

2. a cumulative grade point average of 2.0 (C) or better for any previous college units earned.

To be awarded credit, the student must have a grade notation in at least one other MJC credit course in the semester in which credit is awarded. [Notation includes grade, incomplete (I) or withdrawal (W)]

CAUTION: Please note that four-year college/university policies on awarding credit for courses taken on a credit by examination basis vary from campus to campus.

COURSE CREDIT BY EXAMINATION WILL NOT BE GRANTED:

1. if the units granted would cause the student to have completed more than 30 units of credit by examination

2. in course in which a student is currently enrolled

3. that is below the academic level of a course already completed

4. in which a student has received a grade, i.e. a "W" will be regarded as a grade.

5. in which the student has received Advanced Placement (AP) credit.

TO BEGIN THE CREDIT BY EXAMINATION PROCESS:

1. Confer with the Academic Dean of the course subject area. Credit by Examination is not available for all courses. Check with the Dean to determine if the course you wish to challenge is available for credit by examination. Student must be able to provide evidence of training and/or experience in the subject area. The Dean will give the student a Petition for Credit by Examination to complete. The form is given back to the Division Office. A student who wishes to file for the credit-no credit option must submit this request at the time the credit for examination petition is filed after the Division has approved the Credit by Examination petition.

2. Pay the current per-unit* enrollment fee for each course at the MJC Business Office and bring the receipt to the Division Office.

3. Arrange a time and location for the examination with the Academic Dean, or instructor designated by the Dean.

Units earned by examination do not count towards the residence requirement for graduation nor do they count toward full-time status. Petitions must be filed no later than seven weeks before the end of the semester. A current per-unit enrollment fee will be charged for each course challenged. (A waiver of fee may be granted based on Financial Aid Office criteria.) See page 18 for current fee information.

*Fee subject to change pending action by the CA State Legislature
## Advanced Placement Credit

Modesto Junior College recognizes the Advanced Placement (AP) Program of the College Entrance Examination Board. Advanced Placement credit will be granted to those students earning a score of 3, 4, or 5 according to the following policy:

### AP Policy
- Students must be enrolled at MJC in order to apply for unit credit for AP exams.
- Students will be granted unit credit for AP exam scores of three (3), four (4), or five (5) toward the fulfillment of requirements reflected in the chart.
- Unit credit earned through AP exams will be listed on the transcript based on the AP exam passed.
- Unit credit earned through AP exams to satisfy MJC-GE/Activities/Competencies will be based on the comparable course in the MJC catalog. A list of the comparable courses for each AP exam will be available from the ARC Articulation Officer (MJC 205 D) upon request.
- All CSU campuses will accept the minimum units shown toward the fulfillment of the designated general education breadth area if the exam is included in a full or subject area certification.
- Units earned by AP exams will be used to meet IGETC (Intersegmental General Education Transfer Curriculum), with the exception of critical thinking, Area 1B & Speech Communications, Area 1C.
- Official score reports from the College Board AP Program must be sent to Modesto Junior College, Attention: Vice President, Student Services. Official score reports can be requested at (888) 225-5427 (toll-free).

### Four-Year University Caution

The applicability & quantity of unit credit for AP exams granted toward major or satisfaction of prerequisites, or baccalaureate degree, and/or GE Breadth requirements continues to be determined by the individual CSU/UC/private campuses. Students should meet with an MJC counselor and/or check with the transfer campus of their choice for its policies on awarding unit credit for AP exams.

### AP Restrictions
- Unit credit for AP exams will not be included in the fourteen (14) unit P/NP graduation limitation established by MJC or the thirty (30) unit credit by examination limitation on challenge examinations.
- Unit credit for AP exams will not be used to satisfy the college’s twelve-unit (12) residency requirement.
- Unit credit for AP exams will not be used to satisfy financial aid, veterans, or EOPS eligibility criteria regarding enrollment status.
- Unit credit for AP exams will not be used in lieu of MJC Assessment Tests to satisfy reading, or math prerequisites.

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<table>
<thead>
<tr>
<th>AP Examination Name</th>
<th>Competencies Met &amp; Activities Required</th>
<th>MJC GE Areas &amp; Unit Credit Granted</th>
<th>IGETC Areas &amp; Unit Credit Granted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>C</td>
<td>C1or C2 3 1</td>
<td>3A or 3B 1</td>
</tr>
<tr>
<td>Biology</td>
<td>A</td>
<td>B2&amp;B3</td>
<td>5Bw/lab 1</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>D2                     B4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculus BC</td>
<td>D2                     B4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>A</td>
<td>B1&amp;B3</td>
<td>5A w/lab 1</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>C</td>
<td>C2</td>
<td>3B &amp; 6A 3</td>
</tr>
<tr>
<td>Comparative Govt. &amp; Politics</td>
<td>B, D8</td>
<td></td>
<td>4H 3</td>
</tr>
<tr>
<td>Computer Science A/B</td>
<td>D2                     N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English Language</td>
<td>D1                     A2</td>
<td></td>
<td>1A 3</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>D1                     C2 &amp; C3 2</td>
<td>1A or 3B 3</td>
<td></td>
</tr>
<tr>
<td>European History</td>
<td>C1                     C2 or D6 3</td>
<td>3B &amp; 4F 3</td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>French Literature</td>
<td>C1                     C2 1</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>German Language</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Human Geography</td>
<td>B1                     D5</td>
<td>4E 3</td>
<td></td>
</tr>
<tr>
<td>Italian Language &amp; Culture</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Japanese Language &amp; Culture</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Latin Literature</td>
<td>C1                     C2 1</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>B1                     D2</td>
<td>4B 3</td>
<td></td>
</tr>
<tr>
<td>Microeconomics</td>
<td>B1                     D2</td>
<td>4B 3</td>
<td></td>
</tr>
<tr>
<td>Music Theory</td>
<td>C1                     C1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>A1                     B1&amp;B3</td>
<td>5A w/lab 1</td>
<td></td>
</tr>
<tr>
<td>Physics C: Electricity/ Magnetism</td>
<td>A1                     B1&amp;B3</td>
<td>5A w/lab 1</td>
<td></td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>A1                     B1&amp;B3</td>
<td>5A w/lab 1</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>B1                     C9</td>
<td>4I 3</td>
<td></td>
</tr>
<tr>
<td>Spanish Language</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>C1                     C2</td>
<td>3B &amp; 6A 3</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>D2                     B4</td>
<td>2A 3</td>
<td></td>
</tr>
<tr>
<td>Studio Art: 2D Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art: 3D Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. History*</td>
<td>B1                     C2 or C3 &amp; US-1</td>
<td>3B 3 or 4F 3</td>
<td></td>
</tr>
<tr>
<td>World History</td>
<td>B1                     C2 or D6 3</td>
<td>3B &amp; 4F 3</td>
<td></td>
</tr>
</tbody>
</table>

* Does not contain the California State and Local Government Requirements (US-3) required for American Institution certification. Meet with a counselor for assistance.
1 Students seeking certification in GE Breadths prior to transfer must have passed the test before Fall 09.
2 If a student passes more than one AP exam in physics, only six units of credit may be applied to the baccalaureate, and four units of credit may be applied to a certification in GE Breadth.
3 AP exams may be used in either area regardless of where the certifying CCC’s discipline is located.
4 Students who pass AP Environmental Science exam 4 units of credit. Tests taken Fall 09 or earlier may apply to either (B1+B3) or (B2+B3) of GE Breadth. After Fall 09, those credits only apply to (B1+B3).

**NOTE:** Each AP exam may be applied to one IGETC area as satisfying one course requirement, with the exception of Language other Than English (LOTE).

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Prerequisite Challenge petitions & Course Substitution forms are available through the respective division office.

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**Legend**

- **Units earned**
- **MJC “Math” Competency Met or Exceeded**
- **MJC “Written Expression” Competency Met or Exceeded**
- **MJC “Activities Requirement” fulfilled (and units earned as indicated)**
The District and College provide parking facilities for vehicles for the sole purpose of conducting college business. All persons parking on campus must pay fees as prescribed by the Board of Trustees.

**Students:** All full or part-time students who have paid the required fee are eligible for first-come, first-served parking in designated student parking areas.

**Staff:** All full-time and part-time staff who have paid the required fee are eligible for parking in specific assigned areas marked in black on a first-come, first-served basis. The term STAFF does not include tutors, student employees, or student assistants, but applies only to contract employees of the Yosemite Community College District.

### PARKING RULES

The YCCD Parking and Traffic Ordinances are available for review at Campus Security. A copy of the Condensed Parking Regulations is distributed with every semester or annual parking permit sold. Some basic rules are listed below for your convenience:

1. Permits are required anytime a vehicle is parked anywhere on MJC property, except on Saturday, Sunday, School Holidays, and Fridays after 5 p.m.
2. A student or staff permit is not valid in visitor parking (Green). Visitor spots are for a maximum of 30 minutes. Staff spaces are marked black.
3. Students are not authorized to park in staff parking until after 7 p.m., and must have either a hanging semester permit or a current day pass permit from the Day Pass Machines (Dispenser located in each parking lot).
4. Students can purchase Parking Permits by the semester, at both East and West Campus Business offices. The East and West Campus Business Offices are usually open extended hours for the first two weeks of school.
5. Security officers do not know whose car belongs to whom. Leaving a note in the car in lieu of a permit is not valid for parking.
6. Make sure to read Parking Lot signs carefully. Parking lots may be restricted as to which parking permits are valid during specific time periods. (If so, there are no special restrictions after the times indicated.) The following lots/areas are restricted during specific hours:
   a. East—Parking Lot B (between Science and Coldwell): Staff (A, T), handicap, or guests until 5:00 PM
   b. East—Baseball Field Parking Lot: Only Semester/Annual permits (A, T, S) until 12:00 Noon.
   c. West—Child Care Lot: Semester/Annual permits (A, T) until 12:00 PM.
   d. Area in front of MCL Building: MCL Permit Holders from 8:00 -2:00 PM
7. Permits must be displayed in such a way as to be clearly visible through the front windshield. If you use a sun shield, be sure you do not to cover the permit or knock it to the floor of the car.

### Citations:

All vehicles, operated or parked in violation of the YCCD Parking and Traffic Ordinances will be cited with a Municipal Court citation under authority of 21113a of the California Vehicle Code. Security Officers use electronic citation writers that dispense a citation similar in appearance to a receipt clearly marked “NOTICE OF PARKING VIOLATION.” Specific information regarding payment of the citation online or by mail or to contest the citation is located on the back of the notice; along with warnings about failure to respond in a timely manner.

### Parking Enforcement Hours/Days:

Enforcement of parking and traffic regulations is continuous (24 hours a day, seven days a week). Parking and staff reserve regulations are not in effect from 5 p.m. on Friday to 7 a.m. on Monday and on college holidays and exempt days.

The visitor parking areas on North and South Drive adjacent to the Morris Building are restricted to 30-minute parking for guests of the college, as are all visitor parking zones on east and west campus. Parking permits are NOT valid in visitor parking areas.

**The District/College does not take custody of vehicles and only rents space. No responsibility is assumed for fire, theft, damage, or loss to vehicles, their occupants, or contents while on District/College property.**
Emergencies

EMERGENCIES: 911
(209) 575-6911
ACCIDENTS (ON-CAMPUS) (209) 575-6037 (College Nurse)
CAMPUS SECURITY OPERATIONS: John Muir Hall 151
Phone: (209) 575-6351
Hours: Sunday-Saturday (24 hours)

Campus Safety

Campus safety officers provide 24-hour protection throughout the college’s East and West campuses, including parking areas. Each student is asked to assist in the control of vandalism, burglary and other crimes by reporting suspicious conditions to the Campus Safety Department.

Campus Safety Statistics

The Crime Awareness and Campus Security Act of 1990 requires institutions to report data for certain criminal acts that occur on or adjacent to the campus. The Yosemite Community College District’s Campus Safety Department and Modesto Police Department reported the following crimes on or adjacent to the Modesto Junior College campus for 2005 - 2007.

<table>
<thead>
<tr>
<th>Crime</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Offenses - Forcible</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Murder</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aggravated Assault</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Robbery</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Burglary</td>
<td>4</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Arson</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Vehicle Theft</td>
<td>53</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Weapons Law Violations</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Drug Law Violations</td>
<td>1</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Liquor Law Violations</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

For MJC East and West Campuses Combined

MJC is committed to the success of all students. Drug and alcohol use can be a major hindrance to achieving a successful school career. There are physical and psychological health risks associated with drug and alcohol use, including but not limited to, exhaustion, decreased immunity, depression, and decreased coordination. Generally, persons who use illegal drugs and/or abuse alcohol can expect a decline in their quality of life. MJC Health Services and Wellness Programs offer education and information on drug use and also can refer students to community agencies for counseling or rehabilitation. Contact Health Services for more information.

According to MJC’s Standards of Conduct, students are subject to disciplinary action for the use or distribution of illicit drugs and alcohol on college property or during college-related activities. This can include expulsion from college and/or punishment under local, state and federal law.

Emergency Call Boxes

There are emergency call boxes located in most of the college parking lots. The call boxes may be used to call (1) for a security escort, (2) for a battery jump or door unlock, (3) for any type of emergency service on campus, and (4) to report day pass machine malfunctions.

Escort Service

Campus security officers are available during day and evening hours to escort students to their cars. An escort may be requested by calling Campus Security or using one of the parking lot call boxes.

Personal Safety Tips

In the interest of ensuring personal safety, students are encouraged to observe the following precautions:

- Avoid isolated places, day or night.
- Always walk in pairs. There is safety in numbers.
- Be security-conscious. Watch out for others and their property.
- Be responsible. Report all crimes and unusual activity to Campus Security.
- Use well-lighted walkways.
- Park in well-lighted areas, away from shrubbery and trees.
- Always lock your car and take your keys.

Sexual Assault

Sexual activity without mutual and expressed consent is sexual assault. Acquaintance/date rape is a serious problem on college campuses. Awareness and clear, assertive communication are the best tools for prevention. For more information, contact the Health Services Office, Morris Building, Room 108.

Date Rape

Sexual activity without mutual and expressed consent is sexual assault. On college campuses, 90% of the women who are raped know their attackers. More than half of these rapes occur on dates.

To prevent date rape:

- Know and clearly express sexual intentions and limits out loud
- Go to parties and clubs with friends you trust, and leave with them too
- If you think you are in danger, call a family member or friend for help or go to a safe place
- Be ready and willing to yell, fight, and run
- Tell someone if you have been sexually assaulted
- Learn what resources are available
- Contact MJC Health Services in the Morris Building, Room 108 for more information.

Campus Security Act

The Annual Security Report is available upon request from Campus Safety/Security at (209) 575-7756, or online at www.mjc.edu/campus/security.html.

Drug and Alcohol Abuse Prevention

Through the Drug-Free Schools and Communities Act Amendments of 1990, learning institutions are required to implement drug prevention programs. This includes the annual notification of the following drug and alcohol use policy.
Applying for and Receiving Academic Awards

About MJC Awards

The Board of Trustees of the District shall award the Associate of Arts degree, the Associate of Science degree, and the Certificate of Achievement to applicants upon the satisfactory completion of the requirements as listed in this catalog.

Philosophy of the Associate's Degree

The awarding of an Associate's degree represents more than an accumulation of units. It symbolizes the successful attempt on the part of the student to develop certain abilities and insights by following patterns of learning designed by the college. It is expected that courses used in satisfying the requirements will demand effective study and active involvement on the part of the student and that significant change and growth will result from that study and involvement.

The holder of the Associate's degree will demonstrate college-level skills in reading, writing, and mathematics. In addition to these skills, the student will develop a greater ability to understand the modes of inquiry and expression of the major disciplines in the areas of natural science, social and behavioral sciences, the humanities, English composition, and communication and analytical thinking. Finally, the graduate will evaluate educational opportunities, identify personal goals, explore areas of involvement within the campus community, and develop an understanding of the integrated physiological and psychological human being.

Central to an Associate's degree, these general education requirements are designed to introduce students to the variety of means through which people perceive, describe, and interact with the modern world. Those who earn degrees will be better prepared to address ethical and social problems and to evaluate and appreciate the physical environment, the culture, and the society in which they live.

By completing the requirements of a major, the degree-holder will gain sufficient depth in one field of knowledge to form a basis for more advanced study, to fulfill an occupational objective, or to pursue other lifetime interests.

DIFFERENCE BETWEEN AS AND AA DEGREES

The major difference between the Associate of Science degree and the Associate of Arts degree is in the purpose underlying the programs. The Associate of Arts assumes the completion of a mid-goal in preparation for the bachelor's degree or a termination of an effort which is general education or liberal arts-oriented.

The requirements of the Associate of Science degree approximate a program based upon specific, designated courses which tend to be sequential and lead to the attainment of well-defined performance goals or skill proficiencies.

It is the responsibility of the student to consult with a counselor regarding the proper sequence in which courses should be taken to satisfy graduation requirements.

EARNING MULTIPLE ASSOCIATE'S DEGREES

A student may earn more than one Associate of Arts and/or Associate of Science degree from Modesto Junior College. A course used for a prescribed graduation requirement or to meet general education requirements may count toward more than one degree. However, a student may earn a degree in General College or General Education, but not in both. In addition, a student may not earn an AA and an AS in the same program.

Certificates of Achievement

Students who complete requirements in certain technical and academic programs in Agriculture, Allied Health, Business, Child Development, English, Fire Science, Nursing, and Trade and Technical Education may earn Certificates of Achievement. Certificates are awarded in recognition of completion of requirements specified in each area. Interested students should consult division advisors.

Applying for an Associate's degree or Certificate of Achievement

Where: EAST CAMPUS: Evaluations Office
Morris Memorial Building, Room 107
website: www.mjc.edu
Phone: (209) 575-6421
Hours: M-Tu 8:00 AM – 7:00 PM
W-F 8:00 AM - 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

A candidate for an Associate of Arts degree, Associate of Science degree or a Certificate of Achievement must file an application for the degree or certificate in the Evaluations Office, Morris Memorial Room 107, when a student is in his or her last semester of potential program completion. No student, however, is a candidate for graduation until the degree or certificate application is completed. Graduation ceremonies for degree candidates are held at the end of the spring semester each year. Diplomas will be dated at the end of the semester or summer session in which the qualified student applies. Diplomas and certificates are available to successful candidates approximately two months after term is completed.

Graduation Ceremony for Associate's degree

The Student Development and Campus Life Office is responsible for coordinating the graduation commencement exercise. Instructions for graduating will be outlined in an early spring edition of the Graduation Newsletter. The Graduation Newsletter includes information about commencement exercise, student speakers, graduation luncheon, graduates with honors, graduation fees, caps, gowns and announcements. The Graduation Newsletter includes information about graduate photos, awards, and other accomplishments. Graduation tee-shirts may be purchased from the Student Development and Campus Life office. (209) 575-7991.
Official Transcripts

EAST CAMPUS: Records Office
Morris Memorial Building, Room 105
Website: www.mjc.edu/records/transcriptrequest.pdf
Phone: (209) 575-6018
FAX: (209) 575-6723
Hours: M-Tu 8:00 AM – 7:00 PM W-F 8:00 AM - 5:00 PM
Summer Hours: M-Th 7:30AM – 5:30PM F CLOSED

Official transcripts will be issued upon written request to the Records Office. Processing time is 3-5 working days. To comply with the student privacy laws, transcripts cannot be sent in response to telephone requests. Transcripts cannot be issued without written consent or release signed by the student with the exception of transcripts being sent directly to another educational institution. Official transcripts are provided for a fee of $5 per transcript payable in advance. The first two transcripts are free of charge. Official transcripts will be provided within 24 hours on an emergency basis for a fee of $10, and on-the-spot transcripts will be available for a fee of $20.

Official transcripts will not be issued for students who have a financial obligation to the college or any other type of hold on their records. Any financial obligation to the college should be resolved in the Business Office. For information on requesting transcripts, visit the Records Office or the Records website.

Report Cards

Report cards are not issued at MJC. Grades are posted online at www.mjc.edu as soon as Instructors enter their grades and the Records Office verifies them.

Enrollment and grade verifications will be issued upon written request in the Admissions Office. Students should allow at least ten (10) working days for the processing of verifications. Verifications are not processed during registration periods. Verification requests submitted during registration periods will be available the third week of the term.

Enrollment and Grade Verification

Enrollment and grade verifications will be issued upon written request to the Admissions Office. Students should allow at least ten (10) working days for the processing of verifications. Verifications are not processed during registration periods. Verification requests submitted during registration periods will be available the third week of the term.

To comply with student privacy laws, students must request verifications by completing and signing a Verification Request Form, available in the Admissions Office. Official verifications are provided for a fee of $3 per verification payable in advance. The first two verifications are free of charge. Verifications will be provided within 24 hours for a fee of $10, or on an emergency basis for a fee of $20.

Verifications will not be issued for students who have a financial obligation to the college or any other type of hold on their records. Any financial obligation to the college should be resolved in the Business Office. For information on requesting MJC verifications, students may go to the Admissions Office.

Student Academic Records Regulations

Responsibility for student records rests with the Records Office. However, each college department which houses student records is charged with maintaining their privacy and access according to college policy. Division deans are responsible for certain student files when those students are enrolled in majors within the dean’s division. Students may find files that pertain to them in the division office of their academic major.

In addition, student information is maintained under the supervision of the Chief Operations Officer of Business Services (student financial responsibility), Vice President of Student Services (financial aid, counseling materials, placement data), Vice President of Instruction, (apprenticeship, community services, work experience), and the Dean of Matriculation, Admissions and Records (all permanent academic files).

Student records will be reviewed annually, and those which are no longer required to be maintained per Education Code will be destroyed in accordance with Title V regulations.

Student information designated as public directory information may be released at the discretion of the college to anyone at any time unless the college has received a prior written objection from the student specifying information which should not be released. Modesto Junior College will not release directory information for individual use or to private business or commercial firms for use in advertising or publicity. Directory information includes student participation in officially recognized activities and sports, including weight and height of members of athletic teams and high school of graduation of athletic team members, degrees and awards received, including honors, scholarship awards, athletic awards, and President’s List recognition.

A student’s records are open to the student, employees of the college acting in the course of their duties, and state and federal officials as defined in Sections 54610 and 54622 of the California Administrative Code.

MJC may grant access to individual student records for educational or emergency purposes and for court orders as permitted in Sections 54620 and 54622 of the California Administrative Code.

Students may ordinarily review their records at any time during working hours. The college will make records available within five to ten working days of a student’s written request.

Students can file a complaint against MJC if they feel a privacy or records access/correction violation has been made. The complaint must be made in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605.
Student Records & Privacy Act

For the purposes of this policy, Modesto Junior College (MJC) uses the following definitions of terms. Student - any person who attends or has attended Modesto Junior College (MJC). Education records - any record (in handwriting, computerized print, tapes, film, or other medium) maintained by MJC or an agent of the college that is directly related to a student, except:

1. A personal record kept by a staff member, if it is kept in the personal possession of the individual who made the record, and information contained in the record has never been revealed or made available to any other person except the maker’s temporary substitute.
2. An employment record of an individual whose employment is not contingent on the fact that he or she is a student, provided the record is used only in relation to the individual’s employment.
3. Records maintained by MJC Security if the record is maintained solely for law enforcement purposes, is revealed only to law enforcement agencies of the same jurisdiction and does not have access to education records maintained by the College.
4. Records maintained by Health Services if the records are used only for treatment of a student and made available only to those people providing the treatment.
5. Alumni records containing information about a student after he or she is no longer in attendance at the college and the records do not relate to the person as a student.

Procedure to Inspect Records

Students may inspect and review their education records upon request to the appropriate record custodian. Students should submit to the record custodian or an appropriate college staff member a written request identifying as precisely as possible the record or records he or she wishes to inspect.

The record custodian or an appropriate college staff member will make the needed arrangements for access as promptly as possible and notify the student of the time and place where the records may be inspected. Access must be given in 15 days or less from the receipt of the request.

When a record contains information about more than one student, the student may inspect and review only the records that relate to him or her.

Right to Refuse Access to Records

MJC reserves the right to refuse student access to the following records:

1. The financial statement of the student’s parents.
2. Letters and statements of recommendation for which the student has waived his or her right of access, or which were placed in file before Jan. 1, 1975.
3. Those records which are excluded from the FERPA definition of education records.

Refusal to Provide Copies of Records

MJC reserves the right to deny transcripts or copies of records not required to be made available by FERPA if the student:

1. lives within commuting distance of the college.
2. has an unpaid financial obligation to the college.
3. has an unresolved disciplinary action against him or her.

Fees for Copies of Records

The fee for copies will be 10 cents per page. The fee for subpoenas is $15.00. For transcript and verification fees, see p. 27.

Disclosure of Records

MJC will disclose information from a student’s education records only with the written consent of the student, except:

1. To college officials who have a legitimate educational interest in the records.
   A college official is:
   a. A person employed by the college in an administrative, supervisory, academic, research or support staff position.
   b. A person elected to the Board of Trustees.
2. A person employed by or under contract to the college to perform a special task, such as the attorney or auditor.
3. A college official has a legitimate educational interest if:
   a. Performing a task that is specified in his or her position description or by a contract agreement.
   b. Performing a task related to a student’s education.
   c. Performing a task related to the discipline of a student, or
   d. Providing a service or benefit relating to the Student or student’s family, such as health care, counseling, job placement or financial aid.
4. Information defined as directory information.
5. To officials of another school or college, upon request, in which a student seeks or intends to enroll.
6. To certain officials of the U.S. Department of Education, the Comptroller General and state and local educational authorities, in connection with certain state or federally supported education programs.
7. In connection with a student’s request for or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
8. To organizations conducting certain studies for or on behalf of the college.
9. To accrediting organizations to carry out their functions.
10. To comply with a judicial order or a lawfully issued subpoena.
11. To appropriate parties in a health or safety emergency.
Record of Requests for Disclosure of Records

MJC will maintain a record of all requests for and/or disclosure of information from a student’s education records. The record will indicate the name of the party making the request, any additional party to whom it may be disclosed and the legitimate interest the party had in requesting or obtaining the information.

Correction of Records

Any student may file a written request with the President to correct or remove information recorded in his student records which he or she alleges to be (1) inaccurate; (2) an unsubstantiated personal conclusion or interference; (3) a conclusion or interference outside of the observer’s area of competence; or (4) not based on the personal observation of a named person with the time and place of the observation noted. This procedure does not include the correction of a grade.

The Solomon Amendment

Federal statute (public law 104-208 and public law 104-206, commonly known as the Solomon Amendment) requires that community colleges provide student directory information to the Department of Defense, including military recruiters, upon request.

Annual Notifications:

Educational Research and the Privacy of Student Education Records

Educational Research, including assessment and evaluation of the teaching and learning process, is periodically conducted at Modesto Junior College in established or commonly accepted educational settings, involving normal educational practices.

The Family Educational Rights and Privacy Act (FERPA) is a “Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.” (http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html) “No district representative shall release the contents of a student record to any third party without prior written consent of the student, other than directory information as defined in this policy and information sought pursuant to a court order or lawfully issued subpoena, or as otherwise authorized by applicable federal and state laws.” (YCCD Board Policy 5040: http://www.yosemite.edu/trustees/policyandprocedures/5040%20Student%20Records%20and%20Privacy.pdf) FERPA “prohibits the release of student records (verbally, in writing, or by any other means) … unless there is a specific statutory authorization or a legitimate education interest to be used internally, a need to know (as part of fulfilling job duties) or an emergency.” (YCCD Research Work Group Research Request Protocol)

You are protected under both FERPA and the U.S. Department of Health and Human Services, Office for Human Research Protections. (http://www.hhs.gov/ohrp/)
Student Rights and Responsibilities

Standards of Conduct, Academic Integrity Policy, and Discipline Procedures
STUDENT RIGHTS AND RESPONSIBILITIES

Responsibilities relating to attending MJC

Modesto Junior College strives to make students aware of the varied educational programs that it offers and to provide smooth access to these programs. Once enrolled, the college provides many services to ensure success. Each student is required to:

- Express at least a broad educational intent upon admission (educational goal and educational program)
- Declare a specific educational goal by the time 15 units are earned
- Participate in assessment, orientation, counseling and advising prior to registration
- Complete an educational plan with a counselor in the semester following the completion of 15 units
- Diligently attend class
- Complete assigned work
- Abide by the Student Code of Conduct
- Read and obey all published college rules and regulations
- Officially enroll in every class before the "add" deadline date and pay all fees within 24 hours of enrollment
- Complete courses and maintain progress toward an educational goal according to standards established by the college

It is the responsibility of each student to:

- Inform the Admissions and Records Office of changes in personal data (name, mailing address, email address, phone number(s), major goal, educational status, etc.)
- Enroll in each class
- Complete each class or withdraw officially
- Submit legal, not fraudulent documents

Responsibilities relating to class attendance

All students enrolled at Modesto Junior College are expected to be punctual and attend classes regularly. Instructors are encouraged to announce to their students their policies regarding excessive absences or tardiness at the beginning of the semester. When an instructor determines that a student’s absences are excessive, the instructor may drop the student from the class. It is the student’s responsibility to discuss anticipated and/or extensive absences with the instructor. No absence relieves the student of the responsibility of completing all work assigned. Any student who fails to attend class regularly may be dropped; however, it is the responsibility of the student to complete the course or to officially withdraw from a class. Tardiness may be treated as an absence.

Right to petition for specific consideration

A student may petition for issues related to specific courses (i.e., grade correction, residency, course repeat due for recency). Issues that relate to missed deadlines and graduation requirements are not petitionable. Petitions are reviewed by the MJC Petitions Committee, and in some instances, division deans and/or instructors. Petition forms are available in the Office of Student Success, located on the East Campus in the Library Basement, Room 20. Permission to take excess units and maximum repeats of a course are done through the Counseling Office in the Morris Building, Room 103. Academic Renewal applications are available in the Records Office in the Morris Building, Room 107. Petition forms for Prerequisite/Co-requisite Challenge, No-Show verifications, and Credit-by-Examination petitions are available in division offices.

Right to challenge a prerequisite

Any student may challenge a prerequisite on the grounds that (1) it was not established in accordance with the District’s policy; (2) it is in violation of Title 5; (3) it is discriminatory; (4) student can succeed even though student has not completed the prerequisite; or (5) student will be subject to undue delay because the prerequisite has not been made reasonably available. To challenge a prerequisite, the student must complete a prerequisite challenge form (available in the Division Office for the discipline of the course to be challenged) and state the basis for the challenge. A committee from the Division in which the class is offered will review each petition and render a decision within five working days. It is the responsibility of the student to provide information that supports the challenge.

Academic Freedom and the student

Students have the right to listen, the right to decide, the right to choose, the right to reject and the right to express and defend individual beliefs. As members of the MJC community, students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth.

The educational purpose of the college is best served by this freedom of expression. Students are free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled. Student performance will be evaluated on a broad academic basis, not on opinions or conduct in matters unrelated to academic standards.
Standards of Student Conduct & Behavior

Modesto Junior College under the Yosemite Community College District Board Policy has specified those standards of student behavior which it considers essential to its educational mission and its campus life. These regulations are designed to represent reasonable standards of conduct. The Standards of Conduct governs the behavior of students and guests on campus and at college-sponsored activities. Violations of the codes may subject individuals to disciplinary action, which is consistent with the requirements of due process.

**CAUSES FOR DISCIPLINARY ACTION**

The following conduct shall constitute good cause for discipline, including, but not limited to, the removal, suspension or expulsion of a student:

1. Causing, attempting to cause, or threatening to cause physical injury to another person.
2. Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a district employee, which is concurred in by the college president.
3. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.
4. Committing or attempting to commit robbery or extortion.
5. Causing or attempting to cause damage to district property or to private property on campus.
6. Stealing or attempting to steal district property or private property on campus, or knowingly receiving stolen district property or private property on campus.
7. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the district.
8. Committing sexual harassment as defined by law or by district policies and procedures.
9. Engaging in harassing or discriminatory behavior based on race, religion, creed, color, national origin, ancestry, disability, sex (i.e., gender), marital status or sexual orientation or any other status protected by law.
10. Willful misconduct which results in injury or death to a student or to college personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the district or on campus.
11. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
12. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
13. Dishonesty, forgery, alteration or misuse of college documents, records or identification, or knowingly furnishing false information to the district.
14. Unauthorized entry upon or use of college facilities.
15. Lewd, indecent or obscene conduct on district-owned or controlled property, or at district-sponsored or supervised functions.
16. Engaging in expression which is obscene, libelous or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, or the violation of lawful district administrative procedures, or the substantial disruption of the orderly operation of the district.
17. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
18. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other college activities, including its public service functions, or any other authorized activities. Pagers, cellular telephones and other similar electronic devices must be turned off in classrooms and other campus sponsored events unless authorized by an appropriate faculty or staff member.

**DISCIPLINARY ACTION AND CONSEQUENCES**

Violators of the Standards of Conduct are subject to the following types of disciplinary action, which will be administered by appropriate College personnel:

<table>
<thead>
<tr>
<th>Disciplinary Action</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal Reprimand</td>
<td>An oral admonition or warning to cease and desist from conduct that has been determined to violate the standards of conduct.</td>
</tr>
<tr>
<td>Formal Reprimand</td>
<td>Written admonition or warning to cease and desist from conduct that has been determined to violate the standards of conduct.</td>
</tr>
<tr>
<td>Removal from Class</td>
<td>The involuntary removal of a student from class by an Instructor for a maximum period of two consecutive class sessions.</td>
</tr>
<tr>
<td>Removal from Facility</td>
<td>The involuntary removal of a student by an administrator from a District or College facility, or facility under the control of the District or College for a maximum period of two consecutive days.</td>
</tr>
<tr>
<td>Loss of Privileges</td>
<td>Disciplinary action involving the loss of certain student privileges, such as eligibility to participate in extracurricular activities, for a stated period of time.</td>
</tr>
<tr>
<td>Disciplinary Probation</td>
<td>A status between good standing and suspension or expulsion. It covers a stated trial period and disciplinary conditions required of the Yosemite Community College District.</td>
</tr>
<tr>
<td>Disciplinary Suspension</td>
<td>The involuntary removal of a student for good cause from one or more classes from the college by action of the Student Discipline Officer for a limited period of time, as follows:</td>
</tr>
<tr>
<td>a. Short-Term Suspension</td>
<td>Removal from one or more classes for a period of up to 10 consecutive days of instruction;</td>
</tr>
<tr>
<td>b. Long-Term Suspension</td>
<td>Removal from one or more classes for the remainder of the academic term; Removal from one or more classes for one or more academic terms; or Removal from all classes and activities of the College for one or more academic terms.</td>
</tr>
<tr>
<td>Immediate Interim Suspension</td>
<td>The Student Disciplinary Officer may order the immediate suspension of a student where there is reasonable cause to believe that immediate suspension is required to protect lives or property and to ensure the maintenance of order.</td>
</tr>
<tr>
<td>Expulsion</td>
<td>A student may be expelled for good cause where other means of correction have failed to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of students or others. Only the Board of Trustees may expel a student.</td>
</tr>
</tbody>
</table>

The Standards of Conduct Policy and Procedures are available at: [http://www.yosemite.edu/Trustees/boardpolicy.htm](http://www.yosemite.edu/Trustees/boardpolicy.htm)
Maintaining Academic Integrity at Modesto Junior College

« VIOLATIONS OF ACADEMIC INTEGRITY »

The Academic Senate at MJC shares the original jurisdiction for conduct violations in the area of academic integrity. The Academic Senate at MJC has defined academic integrity and identified possible means for maintaining academic integrity at the College. The following are violations of academic integrity.

- CHEATING: Intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise; misrepresenting or non-reporting of pertinent information in all forms of work submitted for credit.

- FACILITATING ACADEMIC DISHONESTY: Intentionally or knowingly helping, or attempting to help, another to violate a provision of the institutional code of academic integrity.

- PLAGIARISM: The deliberate adoption or reproduction of ideas, words or statements of another person as one’s own, without acknowledgement. This includes all group work and written assignments.

« CONSEQUENCES OF VIOLATIONS »

The grading of a student's work rests on the fundamental idea that an instructor is evaluating a student's own work, so cheating or plagiarism demonstrates a failure to complete this most basic requirement of any course. Thus a faculty member may administer academic consequences for violating the Academic Integrity Policy ranging from partial credit to an F on the assignment or exam.

The instructor may also consider that a student's violation of academic integrity should be a consideration for disciplinary measures. Disciplinary action for violating academic integrity is administered through the Office of Student Success under Board Policy 5500 Standards of Conduct.

« ACADEMIC INTEGRITY IN THE MJC COURSE »

1. Academic areas may develop for their faculty and students a statement of the application of the Academic Integrity Procedure in their courses; and
2. Each faculty member is encouraged to include in his/her introduction to a course:
   a. A statement of the application of the Academic Integrity Procedure within his/her course.
   b. A statement notifying students that violations of the Academic Integrity Procedure will be reported.

« DUE PROCESS FOR VIOLATIONS OF ACADEMIC INTEGRITY »

3. Students shall be given notice of the violation and,
4. Students shall be given an opportunity to respond to the allegations.

Last reviewed: Spring 2007

Policy on Illegal Distribution of Copyrighted Materials

Modesto Junior College students are prohibited from using the Yosemite Community College District (YCCD) information network to illegally download or share music, video and all other copyrighted intellectual property. Modesto Junior College supports the Higher Education Opportunity Act and Digital Millennium Copyright Act, including efforts to eliminate the illegal distribution of copyrighted material. Under the law, college administrators may be obligated to provide copyright holders with information about users of the YCCD information network who have violated the law. Be aware that illegal forms of downloading and file sharing as well as the unauthorized distribution of copyrighted materials are violations of the law and may subject you to academic sanctions from the college as well as criminal and civil penalties, including a lawsuit against you by the Recording Industry Association of America (RIAA). Learn more at www.campusdownloading.com. In addition to being illegal, file sharing drains the YCCD network’s bandwidth, which slows computer connections for students and employees who are using the network for legitimate academic purposes and ultimately costs the college money. The illegal downloading and sharing of music or other copyrighted intellectual property is a form of theft and is prohibited under the Standards of Student Conduct (see page 45). Additional information is available at www.riaa.com (teacher/student information). There are plenty of easy, affordable ways to get music online legally. To protect their intellectual property, companies have licensed hundreds of digital partners that offer a range of legal downloading options, including download and subscription services, legitimate peer-to-peer services, video-on-demand, podcasts and CD kiosks. For a list of sources that offer legal downloading sites, access www.riaa.com.
Nondiscrimination at MJC

It is the policy of Modesto Junior College to provide an environment free of unlawful discrimination. Discrimination on the basis of ethnic group identification, religion, age, sex, sexual orientation, color, or physical or mental disability in the College programs, activities, and work environment is unlawful and will not be tolerated by the College.

The College strongly forbids any form of discrimination and has enacted the following procedures to recognize and eliminate unlawful discrimination. These regulations provide for the investigation of alleged unlawful discrimination in its programs or activities. The College will seek to resolve the complaints in an expeditious manner.

1. "COLOR OR ETHNIC GROUP IDENTIFICATION" means the possession of the racial, cultural, or linguistic characteristics common to a racial, cultural, or ethnic group or the country or ethnic group from which a person or his or her forbears originated. (22 California Administrative Code Section 98210(b).)

2. "RELIGION" includes all aspects of religious observance, practice and belief, including duties of the clergy or elders. A belief is religious if sincerely held and, in the scheme of the believer, holds a place analogous to that filled by the deity of those people whose religion may be more orthodox or more widely accepted. (22 California Administrative Code Section 98220.)

3. "AGE" means how old a person is, or the number of elapsed years from the date of a person's birth. (22 California Administrative Code Section 98230(b).)

4. "SEX" DISCRIMINATION includes:
   a. any rule, policy, or practice concerning actual or potential parental, family, or marital status which differentiates on the basis of sex or sexual orientation;
   b. any rule, policy, or practice concerning disability due to pregnancy, childbirth, recovery from childbirth or termination of pregnancy, or other psychological conditions related to the capacity to bear children not applied under the same terms and conditions and in the same manner as any other rule, policy, or practice relating to any other temporary disability except as otherwise provided by the Fair Employment Practice Act;
   c. any rule, policy, or practice which treats men and women differently for purposes of any program or activity on the basis of aggregate statistical characteristics of men or women, whether founded in fact, belief or statistical probability;
   d. any rule, policy, practice, or incident which conditions the receipt of any benefit upon entering into, or maintaining, a sexual relationship or participation in sexual activity, or subjects a person to sexual harassment or intimidation such as unwelcome sexual advances, requests for sexual favors or other verbal or physical conduct of a sexual nature. (22 California Administrative Code Sections 98240, 98242, 98244.)

5. "SEXUAL ORIENTATION" means a private reference of an individual for heterosexuality, homosexuality, or bisexuality; or a history of such a preference; or an identification with having such a preference.

6. "PHYSICAL OR MENTAL DISABILITY" means any physical or mental impairment which substantially limits one or more major life activities.
   a. "Disabled person" means any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment.

Sexual Harassment at MJC

Sexual harassment is a form of unlawful sexual discrimination and will not be tolerated by the College.

SEXUAL HARASSMENT INCLUDES:
1. submission to conduct which is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress;
2. submission to, or rejection of, conduct by an individual which is used as the basis of an employment or academic decision affecting the individual or has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile, or offensive educational environment; and
3. submission to or rejection of, conduct by the individual which is used as the basis for any decision affecting the individual regarding benefits and services, honors, programs, or activities available at or through the educational institution. (Education Code Section 212.5.)

The College strongly forbids any form of sexual harassment, including acts of nonemployees. Disciplinary action will be taken promptly against any student or employee, supervisory or otherwise, engaging in sexual harassment.
NON-DISCRIMINATION POLICY

Modesto Junior College affirms its commitment to equality of opportunity for all individuals. This commitment requires that no discrimination shall occur regarding admission or access to, or treatment or employment in, any program or activity in the College on the basis of ethnic group identification, religion, age, sex, sexual orientation, color, physical or mental disability, or lack of English language skills. This policy is in accordance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the Age Discrimination Act of 1975. The lack of English language skills will not be a barrier to enrollment in Vocational Programs. Students who believe they have been unlawfully discriminated against because of ethnic group identification, religion, age, sex, sexual orientation, color, physical or mental disability, or lack of English language skills should contact Dr. Robert E. Nadell, Vice President, Student Services, in Morris Memorial Building, Room 212, telephone (209)575-6060.

Yosemite Community College District and Modesto Junior College have made every reasonable effort to insure that everything stated in this 2007-2008 catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the administration of the Yosemite Community College District or Modesto Junior College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the College further reserve the right to amend, or repeal any of their rules, regulations, policies, and procedures.

Inquiries regarding federal laws and regulations concerning non-discrimination in education or the District’s compliance with those provisions may also be directed to:

Office of Civil Rights Old Federal Building
50 United Nations Plaza, Room 239
San Francisco, CA 94102

No Discriminación

Modesto Junior College reafirma su propósito de ofrecer igualdad de oportunidades a todas las personas. Este compromiso requiere que ningún individuo sufra discriminación en cuanto a la admisión, al acceso, en el trato, o en las oportunidades de empleo, en cualquier programa o actividad en esta institución a causa de su grupo étnico, religión, edad, género, preferencia sexual, color, o incapacidad física o mental. Esta política está conforme con el Título VI del Acta de los Derechos Civiles de 1964, Título IX de las Enmiendas de Educación de 1972, Sección 504 del Acta de Rehabilitación de 1973, el Acta de Americanos con Impedimentos, y el Acta contra la Discriminación en el Empleo a causa de la Edad de 1975. La falta de conocimiento del inglés no será obstáculo a la admisión a los programas de educación vocacional. Los estudiantes que crean haber sufrido discriminación por pertenecer a cualquiera de las categorías anteriormente mencionadas deben comunicarse con el Dr. Robert E. Nadell, Vice Presidente, Servicios Estudiantiles en la oficina número 212 del edificio Morris Memorial, teléfono 575-6060.

Yosemite Community College District y Modesto Junior College han hecho todo lo posible por asegurar que el contenido del catálogo de 2007-2008 sea correcto. La información en este catálogo sobre cursos y programas e información sobre otras actividades está sujeta a cambios sin previo aviso a criterio de la administración de Yosemite Community College District o Modesto Junior College por razones relacionadas con el número de estudiantes matriculados, nivel de apoyo financiero, o por cualquier otra razón, a discreción del Distrito y Modesto Junior College. Estas instituciones además se reservan el derecho de añadir, modificar, o anular cualquiera de sus reglamentos y procedimientos.

Para más información respecto a las leyes federales y regulaciones tocantes a la prohibición de discriminación en la educación, o el cumplimiento de este Distrito con dichas leyes y regulaciones, comuníquese al:

Office of Civil Rights Old Federal Building
50 United Nations Plaza, Room 239
San Francisco, CA 94102

To File a Complaint

In the pursuit of academic studies and other college-sponsored activities that promote intellectual growth and personal development, the student should be free of unlawful discrimination or sexual harassment by any member of the academic community. (Students disturbed by the acts of another student have recourse through the Standards of Conduct.)

Modesto Junior College ensures that its programs and activities, including employment, are available to all qualified persons without regard to ethnic group identification, religion, age, sex, sexual orientation, color, or physical or mental disability.

Complaints may be initiated by a student against an instructor, an administrator, or a member of the classified staff. When a student feels he/she has suffered unlawful discrimination, he/she shall within one year of the occurrence of the incident(s) meet with the Vice President, Student Services.

Students are advised to obtain written instructions for the filing of a complaint from the office of the Vice President, Student Services. You may also contact the Americans with Disabilities Act (ADA) Coordinator (209) 575-6267 (voice) or (209) 575-6863 (TTY).
Student Life at MJC

Activities, services, and programs to help you make the most of your MJC experience.
Student Services and Programs

Bob Nadell, Ed.D
Vice President Student Services
Morris Memorial Building, 212
TEL: (209) 575-6060
FAX: (209) 575-6843

Support Staff
Geri Robles, Executive Secretary

Office of Student Success
Martha Robles, Director, Student Success & Special Projects
Where: EAST CAMPUS: Library Basement, Room 20
Phone: (209) 575-6641
Hours: M-F 8:00 AM - 5:00 PM

This office oversees student success projects, petitions and student conduct. Programs such as Tutoring, Supplemental Instruction (SI), TRIO/SSS and the Book Loan program are within the Office of Student Success.

Counseling and Guidance
Where:  EAST CAMPUS:  Morris Memorial Building, Room 103
Phone: (209) 575-6080
FAX: (209) 575-6720
Hours: M-F 8:00 AM – 5:00 PM
Evening Hours: Please refer to counseling website at www.mjc.edu or call the counseling center for more information.
Summer Hours: M-Th 7:00 AM – 5:00 PM F CLOSED
WEST CAMPUS:  Limited appointments available. Call for details.

The counseling and guidance program assists students with decisions which affect their career goals. First-time students should enroll in GUIDE 109, 110, 111, 112, 116, or 120 during their first semester. These courses are designed to help students become better acquainted with the education opportunities at MJC and develop a program of study that will help them attain their educational goals.

Counselors are available to assist students in identifying needs, assessing strengths, and overcoming barriers to fulfilling their educational objectives, including transfer to four-year colleges and universities. Counselors may also assist students in the selection of appropriate programs of study relative to their chosen objectives. Individual student-counselor conferences are available by appointment or walk-in

In addition to a general counselor, the student can work with department advisors to help in program planning. Instructors are also available for individual advising within their subject field.

Lost and Found
EAST CAMPUS: Campus Safety Center, Student Center Rotunda.
WEST CAMPUS: Campus Safety, John Muir, 151 (209) 575-6351

Found property should be turned in to Campus Safety at either location listed above within 24 hours. During the first week, property may be claimed at either location. After the first week, property turned in to East Campus Safety counter will be sent to West Campus Safety, and all lost and found property may be claimed at West Campus Safety only.

About the Student Services Division at MJC
Student Services at Modesto Junior College has as its chief function the facilitation of the education, growth and development of students. The vision of student services is to provide exemplary services that support, inspire and empower students to achieve their goals. Our mission is to provide services and programs in partnership with other areas of the college and the community that will maximize each student’s success.

All student services offices value: access, diversity, honesty, innovation, integrity, kindness, respect, and trust.

The Welcome Center is located in the Student Center on East Campus. The Center houses MJC Outreach and assists students and community members with college information throughout the year. The Center distributes brochures, pamphlets, and literature describing MJC services and programs. Campus and city maps and bus schedules also are available in the Welcome Center.

In addition to providing resource materials, the Welcome Center serves as the college’s link with faculty and instructional divisions during registration. The Center can answer registration questions. Staff are knowledgeable about all registration procedures and assist students with the registration process. The Welcome Center provides information and referrals to students regarding campus policies, campus activities, services, and events; assists new students with campus orientation and registration; makes referrals for students needing special assistance from MJC’s support services; and carries out the college’s outreach plan. Students may walk-in without appointments to obtain campus-related information.

CAMPUS TOURS
Tours of both MJC campuses are provided throughout the year by Welcome Center staff.
The Emergency Locating Service offers students the ability to leave an MJC telephone number with family members, child care provider, or employers in case of an emergency. In an emergency, the Locating Service tells MJC where the student "should" be, and a staff member is dispatched to contact the parent in his/her class. To be a part of the Emergency Locating Service, a student provides his/her current class schedule to the Service on a special form. (Class schedules must be updated each semester) Emergency Locating Service Forms are available in the Student Development and Campus Life Office, located in the Student Center. Without an Emergency Locating Service form on file, a message cannot be delivered to a student.

The Career Development and Transfer Center is a multi-faceted center which houses the Career Development, Job Placement, and Transfer Centers under one roof.

The Career Development Center provides current occupational information to all students and potential students through books, software programs and Internet access. The center offers assessments as well as resources that can help students determine career goals. Referrals are made for career testing and/or career counseling depending on the student’s needs and/or requests.

Job Placement: The Job Placement Office can assist MJC students and alumni to connect with local employers looking to hire college students and graduates. The Job Placement Office serves as a liaison with employers throughout the area who are seeking full or part-time personnel. Job placement activities consist of the following services:

- Job Placement Referrals to Full & Part-Time Employment Opportunities
- Employer Recruitment On-Campus
- Internship Opportunities
- Job Fairs (Fall & Spring)
- Labor Market Information
- Resume & Interviewing Tips
- Job Hunting Guide & Resources
- Email Job Alerts

More information can be obtained by visiting our website: www.mjc.edu/jobsforstudents. Student Job Line: (209) 575-6821

The Transfer Center’s function is to assist MJC students in making a smooth transition to four-year colleges and universities. The Center supports students who plan to transfer with an array of resources and services. Special support is provided to students who have been historically underrepresented. Some of the Transfer activities sponsored by the Center are:

- Assistance with admission procedures and referral to academic advisement.
- Resources such as college catalogs (1,200 catalogs available for check-out).
- Fee waivers, electronic applications and articulation agreements.
- Field trips to universities and four-year colleges
- Individualized appointments with representatives from four-year colleges and universities
- Transfer Admission Agreements (TAA) to designated four-year universities
- Annual Transfer Day/College Night with over 60 college and universities represented

The Modesto Junior College Scholarship Program offers over 150 scholarships annually to eligible students in amounts ranging from $200 to $2,000. Incoming, continuing and students transferring to a four-year college are encouraged to apply for scholarships at MJC. The scholarships are sponsored by the MJC Foundation, private donors, community agencies and businesses whose aim is to help students achieve their educational goals.

To receive scholarship consideration, students must have a minimum grade point average of 3.0 and plan to attend Modesto Junior College full-time. Students currently enrolled in the MJC Nursing Program are considered full-time students. Selections are based primarily on academic performance and may include other criteria such as major, residency, organizational affiliation and community service.

Scholarship applications are available in the Financial Aid/Scholarship Office. The scholarship application will be available beginning October 1, 2009 with the priority deadline being December 11, 2009. The application period will encompass new-incoming, continuing, and transfer students. The deadline for current high school seniors who will be new-incoming freshmen at MJC is March 13, 2010. Students should contact the Scholarship Office for information on applying for scholarships once the deadline has passed. Check with the Scholarship Office for specific dates and deadlines.
CalWORKs Program

Where: WEST CAMPUS: Yosemite Hall, Room 148
Phone: (209) 575-7770
FAX: (209) 575-7778
MJC CalWORKs counselors: (209) 575-7770, 575-7768
Hours: M-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 8:00 AM – 5:00 PM F CLOSED

CalWORKs stands for California Work Opportunity and Responsibility to Kids. CalWORKs is a welfare program that gives cash aid and services to eligible needy California families.

MJC CalWORKs is a state-funded program, which works in conjunction with the Stanislaus County Welfare Office. To qualify for MJC CalWORKs students must be receiving TANF (cash aid) for themselves. In order to ensure academic success, the MJC CalWORKs program provides eligible students with educational opportunities and a variety of support services, including counseling, book loan, child care, work study, and bus passes. Call to make an appointment with a CalWORKs counselor.

CARE Program

Where: EAST CAMPUS: Morris Memorial Building, Room 112
Phone: (209) 575-6838
Hours: M-Th 8:00 AM – 7:00 PM F 8:00AM-5:00PM
Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

The Cooperative Agencies Resources for Education Program (CARE) is a supplemental component of EOPS. The CARE Program strives to enhance self-esteem, develop college success skills and assist students with meeting their educational goals. CARE provides an eligible student a variety of educational and economic support services above and beyond those provided by EOPS, College, State, County and federal aid resources. A student may qualify for childcare reimbursements, bus passes, gas cards, and an additional textbook allowance beyond that provided by EOPS. The Program also provides eligible single parents advocacy and liaison services to facilitate the acquisition of CalWORKs resources, as well as informational workshops, an annual Winter holiday season and Easter cultural events.

TO QUALIFY FOR THE CARE PROGRAM A STUDENT MUST:
1. Be EOPS eligible;
2. Hold “Single Parent Head of Household” status;
3. Have one or more children under the age of 14 years;
4. Parent or child must be a recipient of TANF cash aid.

For more information call the CARE Program services representative at (209) 575-6838.

Wawona Child Development Center

Where: West Campus Wawona Child Development Center
Office: John Muir 157
Phone: (209) 575-6398
Fax: (209) 575-6973
Hours: M-Th 7:30 AM - 5:00 PM

The Child Development Center provides high quality child care for children aged 12 months through the time at which they are eligible for kindergarten. Funded programs include Early Head Start and General Child Care. Priority is given to MJC students while they attend class, study and/or work. Fees may be charged based on the family income and size.

Trained teachers provide creative art activities, small group music, movement and stories, outdoor activities; they help promote the child's social, creative, emotional, and physical development.

Financial assistance for child care is available to qualified students. Additional information may be obtained by calling the Wawona Child Development Center Office.

MeWuk Child Development Lab Preschool

Where: WEST CAMPUS: John Muir, Office 157
Phone: (209) 575-6343
Hours: M-Th 9:00 AM - 12:00 PM
Ages: 2.9 to 5 years of age

Our program is unique in that it offers a parenting course and care and learning opportunities for children in our community including the children of students and staff from MJC while involving child development majors as the classroom teachers.

Our child-centered learning environment builds its philosophy around the belief that "play" is essential to a child's learning. An anti-bias approach is emphasized and curriculum is selected to make all families feel included and respected. Each family arrives rich with culture and traditions to be shared in our classroom!! Key to our philosophy is building caring and nurturing relationships with the children and their families. It is believed that parents are the child's first and most important life-long teachers and our center works to form partnerships with each family. The parents or grandparents are required to enroll each semester in a ½ unit parenting course facilitated by the lab instructor. Our child development students are actively involved for one semester as the classroom teachers under the supervision of the lab instructor, Pam Guerra-Schmidt, and the lab assistant, Sonya Zaragoza.
The Disability Services Program is a system of support services and classes available to students with verified disabilities. Services include a High-Tech Center located on the West Campus.

Disability Services and classes are designed to meet the individual needs of the students, allowing them an equal opportunity to benefit from their educational experiences. Supportive help may include program-planning assistance, priority registration, in-class aides, reader service, note-taking help, sign language interpreting, mobility assistance, and assistance with alternate media. Job development help is available for qualified students, as is an adaptive computer technology training program.

The College Health Services Program was established to contribute to the success of the students by promoting physical and emotional well-being, with strong emphasis on preventative health care.

Registered nurses are available to provide first aid, confidential counseling on communicable diseases, nutrition, exercise and weight management, family planning, and all aspects of personal health. Referrals can be made to local community providers as needed. Health Services provides vision and hearing screening, blood pressure monitoring, tuberculosis screening, pregnancy tests, and immunizations. Non-prescription medications are available for minor aches, pains, colds, sore throats, allergies, and upset stomachs, as are pamphlets and brochures, and health-related video presentations. In case a student is ill or would like to catch up on some needed rest, the cot room is available at various times during the semester.

In case of injury on campus when the college is in session, or in any college-related activity, students should contact Health Services to determine eligibility for insurance coverage.

In case of illness, the College provides care in the form of first aid and/or referral service. Physician services are available on a limited basis to students upon referral of one of the college nurses.

CONFIDENTIAL SERVICES INCLUDE:
• Doctor Clinic: A doctor is scheduled to be on-campus weekly. The doctor can also write prescriptions and make referrals. Please call ahead to schedule an appointment.
• Stanislaus County Public Health and Family PACT Group provides family planning, and some STD screening once a week.
• Mental Health: Referral for group counseling is available for students expressing the need for minor mental health concerns.

SPECIAL ACCESS FOR STUDENTS WITH DISABILITIES
Elevator keys are provided by Health Services to students with short or long-term physical disabilities. Special parking permits are provided to students with short-term physical disabilities.

Informational health insurance brochures are available through Health Services Offices. Students may be seen by a nurse on a drop-in basis as well as by appointment at the above locations. Student ID with current semester sticker required. Call for hours.

The goal of EOPS is to promote and facilitate the college enrollment, persistence and retention of students with histories of educational and economic disadvantage.

EOPS provides students pursuing certificate, transfer, and associate’s degree programs of study, new student orientations, assessment services, educational consultation and planning, academic advisement, career and life planning, pre-employment, and university transfer services. The program also provides retention services, supplemental tutoring, an “early alert” service and “priority registration” assistance, as well as economic support services including textbook vouchers, bus passes, UC and CSU application fee waivers, graduation cap and gown service and an emergency loan program. The Program also offers EOPS eligible first-time college students the opportunity to participate in the Summer College Readiness Program, as well as the Career Paths learning community in the Fall and Spring semesters of each academic year.
TRIO/EDUCATIONAL TALENT SEARCH

TRIO/Educational Talent Search (ETS), funded by the U.S. Dept of Education, is geared to assist low-income, first generation college bound students complete high school and go on to college. The MJC TRIO/ETS Program serves over 600 students from Hanshaw Middle School, Mark Twain Junior High, Modesto and Downey High Schools. A variety of academic and cultural activities are available to TRIO/ETS students. For more information, please contact the TRIO/ETS office at (209) 575-6743 or visit us on the MJC East Campus in the Morris Memorial Building Room 207.

TRIO/UPWARD BOUND

TRIO/Upward Bound (UB), funded by the U.S. Dept of Education, seeks to identify low income, first generation high school students with the potential for post secondary education. Upward Bound offers a comprehensive program of intervention activities designed to generate the skills and motivation necessary for success in high school and college. TRIO/Upward Bound serves 50 students from Davis, Johansen and Ceres High Schools. The program provides workshops, presentations, tutoring, stipends, field trips, Saturday Academies, and a six week Summer Academic Program with residency at a local University. For more information please contact the TRIO/Upward Bound Program office at (209) 575-6743 or visit us on the MJC East Campus in the Morris Memorial Building Room 207.

TRIO/Student Support Services Program

Martha Robles, Director of Student Success and Special Projects

Where: EAST CAMPUS, Library Basement, Room 40

Phone: (209) 575-6189

FAX: (209) 575-6886

Hours: M-F 8:00 AM – 5:00 PM

Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

The Student Support Services program is designed for first-generation college students to promote student success, retention, graduation and transfer to a four-year college or university. TRIO/Student Support Services program provides innovative academic and supportive services specifically designed to meet the needs of transfer students. Program services include: academic and personal counseling; tutoring services; cultural activities, college and university campus tours; information about financial aid and scholarships; career advising; and workshops to develop and enhance academic and personal skills. For additional information, visit our office located in Library Basement, Room 40 or call (209) 575-6189.

Student Development & Campus Life

Wendy Byrd, Director

Where: WEST CAMPUS:

Mary Stuart Rogers Student Learning Center

Phone: (209) 575-7991

Where: EAST CAMPUS: Student Center

Phone: (209) 575-7991

FAX: (209) 575-6143

Hours: M-F 8:00 AM – 5:00 PM

Summer Hours: M-Th 7:30 AM – 5:30 PM F CLOSED

The Student Development and Campus Life Office is located in the East Campus Student Center and the West Campus Mary Stuart Rogers Student Learning Center. It is home to the student government (Associated Students of Modesto Junior College) and all campus clubs. Student ID cards are provided free of charge, the Emergency Locating Service, Housing Referral, Student Bulletin, Student Activities Program, Student Leadership Trainings, Student Lobbying and campus advertising posting approvals are located here. The Student Development Office coordinates many campus activities and special events.

STUDENT ID CARDS

Student ID cards are issued free to new students during registration. ID cards are used for transactions in the Admissions and Financial Aid departments, as well as in the Library and Computer Labs.

Students should carry their ID cards to enhance campus safety and security. Students may purchase a $5.00 activity sticker to be placed on the ID card for special discounts with local services and activities. Students may go to the Student Development and Campus Life Office located in the East Campus Student Center, Mon.-Thurs., 8:00AM to 5:00 PM, and Fridays, 8:00 AM-12:00 PM; and the West Campus Student Center, Mon.-Thurs., 8:00 AM-9:00 PM to have an ID card made. Call (209) 575-6700 for more info. (EAST) or (209) 575-7990 (WEST).

HOUSING REFERRAL SERVICE

The Housing Referral Program has been developed to help students and staff find out about affordable and available housing within the city. A Housing Bulletin Board is available for renters seeking student tenants to list rooms, houses or apartments for rent. Students in need of housing check the board regularly.

STUDENT BULLETIN

The Student Development and Campus Life Office produces the Student Bulletin to inform students about important campus sponsored events, services, or important information. Stop by to pick up a bulletin or find out how to announce your activity in the bulletin.

STUDENT BENEFITS STICKER

The Student Benefits Sticker Program is an optional program where students purchase a $5 activity sticker which is placed on the back of your ID card. The special sticker will afford you special discounts. Your Activity Sticker entitles you to free faxes, copies, scantrons, pencils, local phone calls and more in the Student Development Offices both on the East and West Campus.
Assessment Testing at the Testing Center

Where: WEST CAMPUS: Yosemite Hall, Room 147
Phone: (209) 575-7728
Internet: www.mjc.edu/assessment
Hours: M-F 8:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM - 5:30 PM  F CLOSED
Evening and weekend schedules online at: www.mjc.edu

The Testing Center administers tests for assessment purposes. These tests provide students with results that help them and their counselors understand their individual ability levels.

Testing is one of many measures used by college personnel to assist students in determining course placement in mathematics, English, reading, and ESL courses. Assessment tests are scheduled throughout the year, and should be taken as soon as students are admitted to the college to ensure that the results will be available for advising and registration.

Assessment testing is a free service; however, other tests offered through the Testing Center may require a fee. To inquire about test dates and fees, please contact the Testing Center or the Testing Center website listed above.

Veterans' Services

EAST CAMPUS: Morris Memorial Building, Room 104
Phone: (209) 575-6017
Hours: M-F 8:00 AM – 5:00 PM
Summer: M-Th 7:30 AM - 5:30 PM  F CLOSED

Modesto Junior College is an approved college for the training of veterans and veterans' dependents under the various public laws of the United States Department of Veterans Affairs and the California Department of Veterans Affairs. Students eligible for veteran's benefits are urged to contact the MJC Veterans Affairs Office, well in advance of registration, so that necessary arrangements may be made to activate benefits.

Modesto Junior College recognizes credit and grants credit to veterans and reservists for service and training completed in the armed forces. Veterans and reservists will receive three units of Health Education credit and two units of Physical Education credit upon presentation of their separation papers (DD-214). Credit for military schools will be granted if recommended in the "Guide to the Evaluation of Educational Experiences in the Armed Services." Credit for these courses will be granted if appropriate (18 units maximum). Dependents of service-connected disabled or service-connected deceased veterans may be eligible for a waiver of fees. For information or assistance regarding veterans benefits, contact the campus Veterans Services Office.

Business Services Offices

EAST CAMPUS: Student Center
Regular hours: M-Th 8:00 a.m. - 5:00 p.m.
F 8:00 a.m. - 4:30 p.m.
Summer Hours: M-Th 7:30 a.m. - 5:30 p.m.
WEST CAMPUS: John Muir Hall 154F
Regular hours: M-Th 8:00 a.m. - 11:30 p.m.
12:00 p.m. - 4:00 p.m.
F 8:00 a.m. - 12:00 p.m.
Summer hours: (April 30 - August 24) CLOSED

The Business Services Offices located on both campuses serve as fiscal focal points for all businesses and fund generating endeavors. Both provide check cashing services for students and staff. Business Services Office offers extended hours during the first 2 weeks of the Fall and Spring semesters.

Food Services

EAST CAMPUS CAFETERIA, Student Center
Regular hours: M-Th 7:30 a.m - 3:00 p.m.
F 7:30 a.m - 2:00 p.m.
Summer Hours: M-Th 7:30 a.m. - 2:00 p.m.
Vending machines available in the Student Center.

EAST CAMPUS PIRATES GALLEY/STARBUCKS, Student Center
Regular hours: M-Th 7:30 a.m. - 7:30 p.m.
F 7:30 a.m. - 2:00 p.m.
Summer Hours: M-Th To be determined

WEST CAMPUS CAFETERIA: Mary Stuart Rogers Learning Center
M-Th 7:30 a.m - 2:00 p.m
Vending machines available.
Summer: CLOSED

WEST CAMPUS CONVENIENCE STORE,
Mary Stuart Rogers Student Learning Center
Regular hours: M-Th 2:00 p.m. - 7:00 p.m.
F 7:30 a.m. - 1:00 p.m.
MJC ID Card and Activities Sticker

All enrolled students are eligible for a free Student ID card. Stop by the Student Development and Campus Life Office in the Mary Stuart Rogers Student Learning Center on West Campus. Paying the $5 benefits fee entitles you to discounts with local businesses and at various campus events and one free Go Print Copy card (while supplies last), usable in participating MJC labs. For more details call (209) 575-6700.

TO OBTAIN AN MJC ID CARD
- Business Office Receipt of current class schedule
- Any pure form of picture identification

BENEFITS FEE ADVANTAGES
- Free $2.00 Go-Print copy card (while supplies last)
- Free faxes, phone calls, scantrons and copies (limitations apply)
- Student discounts from local businesses
- Discounts at football and basketball games, as well as student activities
- Proceeds support student programs and activities.

Student Leadership

The Student Development and Campus Life program offers opportunities for students to develop leadership skills, prepare for civic responsibility, explore diverse cultures and build a strong sense of college community. The program reflects the needs and interests of students. The program is divided into the following areas:

Student Government (ASMJC)

Associated Students of Modesto Junior College (ASMJC) is the official representative body of Modesto Junior College students. Student Government officers and senators must have a 2.3 GPA and have completed at least nine units to meet eligibility requirements. ASMJC is completely student-funded, student-elected, and student-regulated, functioning within the framework of policies adopted by the Yosemite Community College District Board of Trustees. ASMJC is the primary forum through which student concerns are channeled.

Since virtually all major decisions that are made on the Modesto Junior College campus affect students in some way, student input into the various decision-making bodies has become increasingly relevant, necessary and welcomed. ASMJC is the officially recognized “student voice” to the faculty and administration.

ASMJC is also responsible for planning, budgeting and coordinating activities for student enjoyment outside the classroom. Activities range from free noon-time concerts on the Quad, to current events, lectures, recreational trips, cultural presentations, comedy shows, and more. ASMJC’s goal is to expose students to a diverse calendar of events for their enjoyment and leadership development.

Clubs & Organizations

The Office of Student Development and Campus Life is responsible for advising and coordinating the activities and programs of student clubs and organizations. Students are encouraged to broaden their horizons by participating in club activities at Modesto Junior College. Clubs are organized to involve students in specialized fields of interest or service to the college and community. If a club does not exist which deals with a student’s special interest, a new club can be formed. Ten MJC students and a faculty advisor are needed to charter a new club. There are approximately 24 existing clubs on campus.

ASMJC CLUBS
- Alpha Gamma Sigma
- Amnesty International
- Anime Otaku
- Art
- Black Student Union
- Drama Ink
- Gamers
- Geology
- Human Services
- Indian Student Association
- International
- Kappa Kappa Psi
- MeChA
- Phi Theta Kappa
- Radio (International Radio)
- Red Nations and Friends
- Spirit Club
- Students for Academic Freedom
- Student Environmentalists Organization
- STEPS Club
- Students with all Abilities
- United Rainbow Alliance (PRISM)
- Veterans’ Club
- Young Farmers

East Campus: Student Center

The East Campus Student Centers are the focal point of campus life. The Welcome Center, Admissions Office, Business Office, Bookstore, Cafeteria, Student Lounge and Student Development and Campus Life Office are located there. Video games, ATM machine, vending machines, and a coin changer are also available. Whether you are sharing a meal, attending a noon-time concert or lecture, volunteering for ASMJC, or just socializing with friends, the Student Center provides numerous opportunities for personal development of students.
West Campus: Mary Stuart Rogers Student Learning Center

The new Mary Stuart Rogers Student Learning Center includes four multipurpose rooms, TV lounge, game room and computer lab. The Associated Students of Modesto Junior College has an office in the West Campus Student Center as well as the East Campus Student Center.

Student Representation

The Student Representation Fee was amended into the California Education Code by Assembly Bill 2576 in late 1988. The student representation fee is a $1 optional fee that can be implemented on any California Community College campus through a student body election. In April of 1993, the Associated Students held a general student body election with the Student Representation Fee on the Ballot. The fee passed. Eight hundred forty-five (845) students voted in the election, and 563 were in favor of the Student Representation Fee.

The Student Representation Fee is collected together with all other fees at the time of registration, and is deposited in a separate fiduciary fund. Money collected is used by ASMJC to represent student concerns at local, state and federal government levels. A student may refuse to pay the Student Representation Fee for religious, political, financial or moral reasons. The refusal must be put in writing.

Honor Societies

AGS

ALPHA GAMMA SIGMA - UPSILON CHAPTER

The Upsilon Chapter of Alpha Gamma Sigma, Inc., the California Community College Honor Society, is open to qualified MJC students.

AGS fosters academic excellence through local and state scholarship opportunities. AGS students build leadership skills, work together on community service activities and network with other motivated students.

Initial membership requires completion of 12 units in a maximum of 3 semesters with a cumulative grade point average of 3.0. First semester students with a cumulative high school GPA greater than or equal to 3.5 are eligible to become temporary members. Continuing membership requires a cumulative GPA of at least 3.0 and a current term GPA of 3.0 or above. Active participation in club activities is required.

Permanent membership is granted to students with greater than or equal to 60 units completed as well as a cumulative GPA of 3.5 or above who have at least one semester of previous membership, or with a cumulative GPA of 3.25 or above who have 2 or more semesters of membership in AGS. Membership information and applications are available in the Student Development and Campus Life Office or at www.mjc.edu/agss.

ФΘΚ

PHI THETA KAPPA - BETA MU CHAPTER

Phi Theta Kappa is present at MJC with the Beta Mu Theta chapter. Phi Theta Kappa is the largest international honor society in American higher education with more than 1.5 million members and 1,200 chapters located on community college campuses throughout the fifty states, U.S. territories, Canada, and Germany. Phi Theta Kappa's mission is twofold: 1) recognize and encourage the academic achievement of two-year college students and 2) provide opportunities for individual growth and development through participation in honors, leadership, service, and fellowship programming.

New members will receive a membership pin, diploma seal, and transcript notation of membership. Members are automatically nominated for inclusion in the prestigious National Dean's List biographical publication and are accorded the privilege of wearing the society's gold stole and tassel at graduation. Chapter members will be eligible for Phi Theta Kappa scholarships and are automatically enrolled in the society's transfer database, one of the nation's leading scholarship engines that links four-year institutions offering scholarships to Phi Theta Kappa members. For more information, call Jim Beggs, program advisor at (209)-575-6164.

Study Abroad Program

Modesto Junior College students enjoy the opportunity to pursue their studies at a number of international locations. Regularly scheduled semester long programs take place in London, Paris, and Florence, Italy. Courses offered at each of these locales meet General Education Transfer Pattern and graduation requirements, so while spending a semester in an international setting, progress continues toward completing major educational goals.

Students in the full semester programs are required to complete 12 units while the summer students earn 6-7 units of credit. For information, contact the Instruction Office at (209) 575-6058.

Art Gallery

Located within the Art Department on the East Campus across from Founder's Hall, the Art Gallery is the college's original exhibition space. Each year the Art Gallery presents an average of six exhibits representing a wide range of art styles, media, techniques and conceptual ideas. The exhibitors include emerging and more established artists from California and elsewhere, as well as annual exhibit events for MJC art students and the art faculty.

Students enrolled in Gallery Operation and Management (ART 150) assist in the gallery operations and learn techniques of gallery preparation and art installation for the various exhibits. Students awarded in Federal Work-Study may apply for positions as attendants.

Music Performance

Students from all areas are welcomed to participate in MJC's active performance program. Instrumental performance opportunities include Guitar Orchestra, Community Orchestra, Symphonic Band, Community Concert Band, Jazz Bands and Pep Band, plus brass, percussion, woodwind, and string ensembles. Vocal performance opportunities include Masterworks Chorus, small vocal ensembles, Musical Theatre, and vocal jazz/pop ensembles. Elementary, intermediate and advanced piano, organ, guitar, instrumental, and voice are classes available to both music majors and non-music majors. The music theory and musicianship programs are among the strongest in the area. Students wishing to transfer as music majors to a four-year institution are strongly encouraged to enroll.
Athletics

Modesto Junior College is a member of the Big Eight Conference for both men’s and women’s sports. The men compete in baseball, basketball, cross country, football, golf, soccer, swimming, tennis, track and field, water polo and wrestling. Women compete in basketball, cross country, soccer, softball, swimming, track and field, tennis, volleyball, water polo and golf.

Other Big Eight Conference members are American River College, Sacramento; Cosumnes River College, Sacramento; Diablo Valley College, Pleasant Hill; Sacramento City College, Sacramento; San Joaquin Delta College, Stockton; Santa Rosa Junior College, Santa Rosa; and Sierra College, Rocklin. Since 1937, MJC has hosted an annual statewide basketball tournament in December. It is the oldest community college invitational basketball tournament in the state.

Pirates' Log Campus Newspaper

The Pirates' Log is MJC’s award-winning campus newspaper, a biweekly publication written, edited and produced by students enrolled in journalism classes. In recent years, Pirates' Log staffers have won many writing and layout awards, competing with other student journalists from around the state. The local media has picked up stories first covered in the Log. Working on the Log provides an invaluable opportunity to experience the rhythms, challenges, pressures and rewards of newspaper journalism, to build a portfolio of published stories or photographs, to gain work experience and form lasting friendships. Students also produce an online version of the Pirates' Log, reflecting the real world of multimedia journalism. The editorship of the Pirates' Log is now a paid Work-Study position for qualified applicants. Many former Log writers and editors are found today in the ranks of local media professionals. Participation is open to any student enrolled in Journalism 146 (photographers) or 120 (writers) who has passed Journalism 100.

Quercus Review

Established in 1999, Quercus Review has quickly become a prominent literary arts journal, publishing numerous nationally recognized, award-winning authors and artists from around the world. Published annually in the spring, each issue is edited by experienced MJC poetry students. In addition, Quercus Review Press publishes one book of poetry per year by an individual author through its contest publications. Information is available at www.quercusreview.com

Student Arts Competition:
The Celebration of the Humanities

The Arts, Humanities and Communications Division and the Literature and Language Arts Division sponsor an annual campus-wide student competition in eight major categories: Visual Arts, Photography, Theater, Writing, Speech, Dance, Music, Film/Video. MJC students registered in the current summer, fall or spring term can enter to win awards and cash prizes. Visit www.mjc.edu/celebration for details.

Forensics - Competitive Speech

With a proud tradition of state champions, Modesto Junior College competes with other colleges and universities in forensics. Students participate in various debate formats and individual events. The competition occurs in state, and national arenas.

Theatre Productions

Four to five productions make up the performance season for MJC theatre. Shows are produced in the 946-seat auditorium, the 94-seat Little Theatre, and the black box theatre, Cabaret West. A show is usually produced during the summer session. Students are active in all aspects of the theatrical arts with academic credit available in acting, lighting, costuming, and scenic techniques.

TV - Film Productions

Television and film students produce a variety of work which may air on local cable television and is ready for submission into film festival competitions. Students will learn to produce, direct, act as talent, shoot and edit film projects and television programs. In addition, qualified students can secure internships with the MJC TV-FILM production company or with local/regional television stations and production companies. The MJC television and film facilities include a 3-camera television studio and control room, along with cameras and editing equipment to produce professional caliber projects. Film students produce a variety of work, which is aired on cable and online.

Pirates' Radio

MJC students operate an on-line radio station, MJC Pirates' Radio as part of a professionally oriented program. Each student programs his/her own radio hour each week. MJC Pirates' Radio, which is located in the Performing and Media Arts Center on the East campus, can be heard campus wide and also picked up on the local cable network and online. MJC Pirates' Radio also features a recording studio. Many former student DJ's have gone on to professional radio work on the West Coast from Seattle to Los Angeles.

The Mary Stuart Rogers Student Learning Center (left) located on MJC’s West Campus features a multipurpose rooms, a TV lounge, game room and computer lab. Construction of the Center was funded by a charitable donation from the Mary Stuart Rogers Foundation and aided by Student Center fees.
Learning Resources Department
Tobin Clarke, EdD
Dean of Library and Information Technology
MJC Library (East)
(209) 575-6235

DISTANCE EDUCATION
James Clarke,
Coordinator of Instructional Technology & Distance Education

Library

EAST CAMPUS:
Library Building
Phone: (209) 575-6230
FAX: (209) 575-6669
Hours: M-Th 8:00 AM – 9:00 PM  F 8:00 AM – 5:00 PM
Sat 9:00 AM – 5:00 PM
Summer Hours: M-Th 7:30 AM – 5:30 PM
F & S (CLOSED)

WEST CAMPUS:
Yosemite Hall A 235
Phone: (209) 575-7761
FAX: (209) 575-7796
Hours: M-F 8:00 AM – 5:00 PM  S (CLOSED)
Summer Hours: CLOSED

Library and information services are located on both the East and West Campuses and can also be accessed through the MJC Library web page. The library staff welcome questions and are happy to help users access and use the many library resources available to them.

The library’s collection includes books, magazines, newspapers, journals, DVDs, videos, eBooks, and a variety of online research databases. MJC students have access to Columbia College Library materials via the library’s intercampus loan service, and students can obtain research materials from non-YCCD libraries using the library’s interlibrary loan service.

Campus library services include individual reference and information services, instruction on library research methods, computer labs, copy machines, study space for individuals and groups, and course reserves. Off-campus use of library resources is facilitated by the library’s web page (http://virtual.mjc.edu/mjclibrary/) To access the library’s online databases and eBooks from off-campus, students need to authenticate by entering their student ID number and date of birth. Users can submit reference questions from remote locations by using the “Ask an MJC Librarian” feature on the library’s home page.

LIBRARY FACULTY
Sue Adler, Coordinator of Collection Development
Iris Carroll, Coordinator of Reference Services
Kathleen Ennis, Coordinator of Library Instruction
Ellen Dambrosio, Coordinator of Library Systems
Wendy Griffiths-Bender, Cooperator of Outreach
Michael Akard, Computer Lab Instructor/Coordinator

LIBRARY SUPPORT STAFF
Lolanda Carson
Sandy Gallardo
Mary Beth Gish
Dodie Larson
Prasad Mathai
Linda Occhipinti
Charlene Olivera
Yia Vang
Manuel Vargas
Isabelle Lacazotte

LIBRARY INSTRUCTION
Learning Resources offers a variety of learning opportunities to support the information competencies applicable to college-level research and lifelong learning. Students can participate in curriculum-specific instructional sessions arranged by their instructors or enroll in formal Library Research courses emphasizing skills that can be used in many research and information applications.

TELECOURSES (TELEVISIONED COURSES)
The Telecourse Office, located on the East Campus, Library 120, assists students with MJC telecourses. A drop-box is located just outside the office door for students who need to turn in assignments.

Telecourse classes are listed in the MJC Schedule of Classes each semester. Several telecourses are available for viewing on Charter Cable and/or Comcast Cable. DVDs and videos may also be checked out for the entire semester at the MJC Library Reserve Area. On-campus meetings are usually required, but most assignments can be done at home or elsewhere. For more information, view the orientation videotape in the MJC Library, contact the Telecourse Office, or check the most recent Schedule of Classes for MJC.

All students, faculty, and staff, as well as college retirees, have full library privileges. MJC Alumni and Library Friends may obtain library cards for borrowing MJC Library materials. The cost of the card is $25.00 per year.

Support Staff

Sue Adler, Coordinator of Collection Development
Iris Carroll, Coordinator of Reference Services
Kathleen Ennis, Coordinator of Library Instruction
Ellen Dambrosio, Coordinator of Library Systems
Wendy Griffiths-Bender, Coordinator of Outreach
Michael Akard, Computer Lab Instructor/Coordinator

LIBRARY FACULTY

LIBRARY SUPPORT STAFF

TEAM SUPPORT

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ONLINE COURSES

Online learning at MJC is a quality alternative to traditional classes. No distinction is made between the requirements and expectations for traditionally taught courses and online courses. This means that the content and outcomes of online courses are the same as those taught in the on-campus classroom. It is the flexibility of time and convenience that appeals to online students.

Online courses require a self-disciplined student - one who is an active learner. Courses require participation through frequent online communication with instructors and other students. These courses are best suited for those who can manage time and take responsibility for their education. The student enrolled in an online class should have a basic understanding of Internet browsers (Internet Explorer); using file attachments and basic word processing programs. They should also be good problem solvers who are not intimidated by technology.

Online students must have access to the Internet at home and/or in their place of employment. If necessary, students may gain access to the Internet and MJC online courses via one of many MJC open computer labs during regular lab hours. (Certain classes have specific software and course requirements; check the web site for further information.) For additional information on all MJC online courses, point your Internet browser to: mjc.edu/distance_ed/online_info.html

Academic Computer Labs

There are three open computer labs to support student computing; all three labs have general programs for word processing, spreadsheets, or databases. Many computers within the labs also have course-related programs for math, computer programming, or ESL. All labs have Internet access; and are available to any MJC student for academic purposes.

The college also has specialized computer labs associated with instructional divisions such as agriculture, computer graphics, ESL, and engineering. These labs may have scheduling periods when any student can use them. Check with the division or lab supervisor for available hours.

The three open labs are listed below. Because the labs are updated frequently, check ahead of time if you need to use a specific software program.

East Campus Library Open Computer Lab: Located in Room 116 of the MJC Library, this lab has Windows computers equipped with Microsoft Office Suite, 2007. The lab is open Monday through Thursday from 8:00 a.m - 9:00 p.m.; Friday, 8:00 a.m - 5:00 p.m.; Saturday, 9:00 a.m - 5:00 p.m., with special hours during the summer session. Student aides are available to assist and answer questions.

West Campus Library Open Computer Lab: Located in the West Campus Library, Yosemite 235, the lab is open Monday-Friday, 8:00AM - 5:00PM. Closed during the summer session.

STaR Lab: This lab is located in Room 124, Founders Hall. The lab has 30 computers, and laser printers are also available. The hours are Monday through Thursday from 7:30 a.m. - 8:30 p.m. and Friday from 7:30 a.m. - 4:30 p.m.
Support for Learning

The East Campus Pirates Bookstore carries textbooks for classes on the East Campus as well as school and office supplies, general books, MJC collegiate fashions, gifts, greeting cards, newspapers, candy, snacks, jewelry and calculators. We offer computer software at educational prices. The Artists’ Cove in the back section of the store carries a wide variety of artist materials and supplies. The West Campus Pirates Bookstore carries textbooks for the West Campus, as well as school and office supplies, candy, snacks, MJC collegiate fashions, gifts, greeting cards, newspapers, jewelry and calculators. MJC catalogs and class schedules may be obtained through both bookstores and can be mailed prepaid. Bookstore hours are extended during the beginning of each semester. Visit us at our website: bookstore.yosemite.cc.ca.us.

Book Loan Program
WEST CAMPUS: Yosemite Hall, Room 118
Phone: (209) 575-6979
Hours: M-F 8:00 AM – 5:00 PM
Summer: M-Th 7:30 AM - 5:30 PM F CLOSED

The VTEA Book Loan Program is available to assist eligible students with the purchase of textbooks each semester. Eligibility guidelines include minimum GPA, unit requirements, income level, and major. Students borrow books for the semester and are required to return them at the end of the semester for future student use. Funds are limited, so students should apply early. For more information and specific eligibility requirements, please contact the Book Loan office.

Tutoring Center
EAST CAMPUS: Library Basement, Room 10
Phone: (209) 575-6839
Hours: M-F 8:00 AM – 5:00 PM
Summer: M-Th 7:30 AM - 5:30 PM F CLOSED
WEST CAMPUS: Yosemite Hall, Room 118
Phone: (209) 575-7731
Hours: M-F 8:00 AM – 5:00 PM
Summer: M-Th 7:30 AM - 5:30 PM F CLOSED

The Tutoring Center is a free service for MJC students who need extra help with academic work, no matter what the subject or class. Tutors are experienced learners, and will be happy to provide students with the kind of help and support they need. Tutors will assist students who are preparing for specific examinations, as well as those who wish to strengthen their overall study skills. Students who seek help at the Tutoring Center often improve their overall academic performance by learning to study more efficiently.

First-Year Experience Learning Communities
Learning communities are designed to help first-year students as they begin college. Learning communities are clusters of pairs of courses which are offered as a package. The learning community packages revolve around different themes, and the teachers work together so students can make connections between the classes. The instructors plan readings, assignments, and extra activities that are incorporated into all of the learning community courses. Currently, MJC offers basic skills and transfer-level learning communities. Students can register early for a learning community package by using a special registration form available from the counseling office. To find the learning communities that are being offered, look for the learning community pages in the MJC Schedule of Classes.
At the Math Drop-In Center, math assistants are available to help understand your math homework, as well as aid you in understanding math concepts. This is the place where you can bring your short, quick questions, and get prompt responses. The goal of the Drop-In Center is to help you get your homework finished as quickly and accurately as possible.

Center for Learning Assistance (CLA)

EAST CAMPUS: Founders Hall, 105
Phone: (209) 575-6475 or (209) 575-6799
WEST CAMPUS: Sierra Hall, 214
Phone: (209) 575-7847 or (209) 575-6799

The CLA is a computer learning center which offers self-paced, computer-based courses for students who want to work to improve their English grammar, sentence and paragraph writing abilities, reading comprehension, and ESL skills. CLA courses include PLATO modules or other computer-based modules, and a scheduled weekly study group for students to discuss course exercises and ask questions.

Many CLA courses are paired with basic skills learning community courses to review and reinforce what students are studying in their learning community courses. Call the CLA for more information about CLA courses or to receive a CLA brochure.

At the Writing Center, you can get the support you need to improve your writing skills. Tutors will work with you on any writing-related task for any subject to help you understand your assignment, gather ideas, focus on the topic, and organize the paper.
Planning Your Education

Make educational choices to support your goals.
Planning Your Education

Why are you attending MJC?

We all have unique interests and goals. You may be attending Modesto Junior College for any number of reasons. MJC offers courses in an array of disciplines that can prepare you for skilled trades, specialized careers, job advancement, and transfer to major four-year colleges or universities to further your education. Your goals should have a direct influence on the courses and programs you choose to complete while at MJC. It is important to keep your goals in mind at all times when selecting classes and programs and to remain informed about requirements specific to your goals.

Planning is Critical

You may already know what you want to accomplish while enrolled at MJC, or you may be trying to explore your options and may be unsure of what is necessary to reach your goals. MJC offers Guidance classes which are designed specifically to help you identify your goals and to plan accordingly. Guidance classes are taught by MJC counselors who are informed about education and career options that await successful MJC students. The purpose of Guidance courses is to assist you in reaching your goals as quickly as possible.

Proof of Your Success

Regardless of what you choose to accomplish at MJC, you can take proof of your hard work with you in an award. MJC offers awards showing educational achievement in an array of academic or vocational areas (see p. 67). If you are hoping to apply skills and knowledge to the job market once you have finished at MJC, having proof of your accomplishments can be an asset.

Skills Recognitions are locally recognized awards which indicate that you have received training needed by employers in our community, but completion of a Skills Recognition does not appear on your transcript. Record of completion will be stored in the MJC Records Office.

Certificates of Achievement are state-approved and show that you have successfully completed one or more courses in a targeted career or skills area. Completion of a certificate of achievement will appear on your transcript.

Associate’s degrees are awards that are more rigorous than certificates, because—in addition to concentrated study in a specific skill or knowledge area—they require coursework in an array of disciplines to broaden your learning experience and strengthen your critical thinking skills. This is referred to as General Education. As an Associate’s degree candidate, you will complete one of three General Education patterns, MJC-GE, CSU-GE, IGETC.

- Associate degree majors are a specific collection of courses designed to give you more knowledge or mastery in a specific subject matter. Some of these majors are designed to help you prepare for transfer to a baccalaureate degree program at a four-year college or university (see ).
- Associate degree emphases allow you to select from a list of courses within an area. These programs, with the exception of the General Studies program, are designed to help you prepare to transfer to a baccalaureate degree program at a four-year college or university.

What do you want to do at MJC?

☐ Earn an Associate’s degree in a specialized field of study
☐ Transfer to a four-year college or university to further your education
☐ Improve basic skills in reading, writing, and math
☐ Gain skills for job placement or advancement through a Certificate of Achievement or Associate’s degree.
Educational Plans

An Educational Plan (see p. 73) is developed with a counselor to provide you with a map that lists courses and support services that are required or recommended for successful completion of a student’s goals. It is to your advantage to develop an Educational Plan as soon as possible. Guidance courses offered by the Counseling Center are designed to assist students in developing Educational Plans. A Guidance course is also required for graduation. All students should have an Educational Plan by the time they have earned 15 units. If a student is undecided as to his/her goal, a counselor can provide timely and updated information to help the student choose a realistic goal.

Which path is right for you?

✓ Earn an Associate’s degree

MJC offers Associate’s degrees in numerous subject areas. If you’ve decided that you want to earn an Associate’s degree, meet with a counselor to ensure that your courses are appropriate for your short and long-term goals. Associate’s degree holders have the option to progress to bachelor’s degree programs, but not all courses for Associate’s degree are applicable to the bachelor’s degree. Depending on the major you choose from those available in the catalog, you and your counselor will select courses from the MJC-GE pattern to fulfill the General Education requirement, and choose a major that aligns with your short and long term goals.

✓ Earn an Associate’s degree and apply to a university

MJC has an outstanding means through which you can earn an Associate’s degree while completing coursework that applies toward a bachelor’s degree. Transfer students may complete one of two transferable General Education patterns: CSU-GE (California State University General Education) on p. 76, or IGETC (Intersegmental General Education Transfer Curriculum) on p. 78. Meet with a counselor to determine which pattern is right for your goals.

✓ Improve Basic Skills

Basic skills courses will help you to improve skills in reading, math, writing, and English, to prepare you for further coursework in college. If you feel that you are in need of basic skills courses, and complete the MJC Assessment tests in reading, English, and math for appropriate course placement and meet with a counselor who can help you identify which courses are best for your skills level.

✓ Prepare for job placement/advancement

If you are hoping to apply skills and knowledge to the job market once you have finished at MJC, you have two choices. You may choose to earn a Certificate of Achievement, or an Associate’s degree in a specialized field of study, or major. Certificates of Achievement are a way to quickly gain targeted skills for a job. Most associate’s degree majors at MJC are also applicable to the local job market, in that your General Education experience will be valuable to prospective employers who need your critical thinking skills. Regardless of your job placement goals, you will want to meet with a counselor to plan accordingly.
Which educational award is right for you?

Use this chart to get a better sense of what is needed to help you meet your unique goals. Choose the type of award you wish to earn. This sheet is not intended to be used in place of a one-on-one counseling session. See page 67 for a list of all awards offered at MJC.

**Earn an Associate's degree**
Do you want to transfer to a four-year school or go into the workplace upon completion of your associate's degree? Check out the options below to get an overview of what is required for either educational path.

**Take a Certificate to work**
Browse the catalog and find the Certificate Of Achievement that best suits your career goals. Meet with a counselor to set up your educational plan. You may also want to talk to a faculty advisor to learn more about career opportunities and prospective employers.

**Take an Associate's degree to work**
Make an appointment with a counselor or enroll in a Guidance class. You may be advised to follow the Career Technical Education Pathway (p. 71): Occupational and Technical Studies for Associate’s degree. Browse the catalog and identify which of the many Associate’s degree majors might interest you.

**Transfer to a four-year school**
Make an appointment with a counselor or enroll in a Guidance class. In the meantime, review the University Preparation Pathway (p.69). Review the two transferable GE patterns to get a sense of what courses you may need to support your educational goals. You will choose a major or an area of emphasis from the MJC Catalog.
## Educational awards offered at MJC

Modesto Junior College confers the following educational awards to students who have met the requirements for each as listed in this catalog. For more information about the requirements for a specific award, see the page listed. The following awards may be awarded to students with catalog rights to the 2009-2010 MJC Catalog.

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What is the University Preparation pathway?
Many students attend MJC to start their pursuit of an expansive college experience, often culminating in a bachelor’s degree, masters degree, PhD, or other professional degree conferred by another institution.

By attending MJC you can complete courses that apply toward a bachelor’s degree granted by another institution. By following the University Preparation pathway on page 69, you will be able to complete coursework that is not only applicable to an Associate’s degree at MJC, but can also fulfill lower-division requirements for Bachelor’s degree at UC and CSU, and some other schools in California.

Completion of either pattern will fulfill the general education requirement for an Associate’s degree. Please note that completion of the IGETC pattern is not preferred for all schools and majors within the UC system. For the most current information, see IGETC Considerations on page 79 or refer to www.assist.org for the most current course statuses. Most importantly, you should meet with a counselor to help you choose the appropriate pattern and coursework for your target school.

Certification of General Education
After completing the IGETC or CSU-GE patterns, or the University Preparation Pathway, you will need to request that your transfer pattern coursework be certified by the Records Office (Morris, 105). MJC General Education certification means that your transfer pattern coursework at MJC is officially recognized by the transfer institution as fulfillment of the corresponding General Education requirement(s) for baccalaureate degree when all coursework is completed with a C or better. If you do not have your MJC coursework certified, you can be held accountable for the target institution’s General Education requirements upon commencing your study at that institution. Please note that the IGETC pattern allows only the entire pattern to be certified, while the CSU-GE pattern can be certified by individual “area.”

Transferable Courses
Transferable courses are those MJC courses that will apply toward baccalaureate credit at the institution to which you plan to transfer. For CSU, all courses numbered 100-299 are considered transferable, while UC accepts some - but not all- 100-299 courses. For more information on transferring and which MJC courses are UC or CSU transferable meet with an MJC counselor and visit www.assist.org. CSU and UC will accept a maximum of 70 transferable units completed prior to transfer.

General Education Transfer Patterns
MJC, California State University (CSU), the University of California (UC), and other colleges and universities have created a process through which community college students can complete requirements for bachelor’s degree while attending California Community Colleges. At MJC, two General Education Patterns (CSU-GE and IGETC) are in place to allow you to complete most, if not all “lower-division” general education breadth requirements for bachelor’s degree as an MJC student. The CSU-GE and IGETC patterns are lists of MJC courses that you can take to fulfill certain requirements of the CSU and UC systems.

The MJC Transfer Center, located on the East Campus, is a comprehensive resource for transfer-oriented MJC students.

Many MJC students apply to transfer to UC and CSU systems and are able to start classes at junior status.
To earn an Associate Degree:

1. Complete 60 units in courses numbered 100 to 299, twelve (12) of which must be completed “in-residence” at MJC. All courses numbered 100-299 will transfer to CSU, while some 100-299 transfer to UC. Please note that not all transfer units are accepted by every university. Consult an MJC Counselor or www.assist.org for information on transferable MJC courses. Only one degree may be awarded in any one program.

2. Earn an overall GPA of 2.0 or higher (C average) based on all work attempted in college courses numbered 50 to 399.

3. Complete the MJC Guidance and Activities Requirements* (see p. 74).

4. Fulfill the general education requirement* for the school you plan to attend by successfully completing the appropriate General Education (GE) Transfer Pattern (with a C or better in each course) as indicated below. Upon completion of the GE pattern you select, you will be eligible for a Certificate of Achievement in CSU-GE or IGETC from MJC. For more information, visit the Evaluations Office (Morris, 107). Successful completion will also demonstrate that you have met or exceeded state-required competencies for reading, writing, and mathematics.

5. Select and complete an Associate’s Degree major or an Area of Emphasis

   - Associate’s Degree with Associate in Arts (AA) or an Associate in Science (AS) major: The associate’s degree with an AA or AS major will demonstrate that you have taken courses in many college disciplines in order to gain critical thinking skills, in addition to completing a series of courses in a focused subject area. Your final transcript will show that you have earned an AA or an AS in the chosen area. Please note that some AA and AS majors include more courses than the required lower-division preparation for bachelor’s degree at the targeted college or university, so they may not be effective for bachelor’s degree preparation. Please see a counselor to carefully select courses for MJC and your target institution. You may complete any AA or AS in this catalog Students who complete the (University Preparation Pathway with an AA/AS major will earn a degree in the major. For example the student who completes the University Preparation pathway who chooses to complete the AA major in Physical Science, will receive a degree that reads: AS Degree: Physical Science.

   - Associate’s Degree in University Preparation with an Area of Emphasis. Like the associate’s degree major, the emphasis will demonstrate that you have taken courses in many college disciplines in order to gain critical thinking skills. The emphasis, however, is a set of courses that you complete at MJC to prepare you for the major in which you plan to earn a bachelor’s degree. Courses in the emphasis are carefully selected to fulfill major requirements and to prepare you for your bachelor’s degree major at the transfer institution. For University Preparation emphases options, see page 173. Students who complete the (University Preparation Pathway with an emphasis will earn an A.A. degree in “University Preparation: [emphasis]”. For example, a student who completes the University Preparation “Humanities” emphasis would earn a degree that reads AA: University Preparation: Humanities.

6. Earn a grade of C or Better in every course completed for the Area of Emphasis or the AA/AS Major.

7. Apply for your degree. The Associate in Arts Degree (AA), Associate in Science Degree (AS) and/or the Certificate of Achievement in CSU-GE or IGETC are not automatically awarded when you complete the requirements. You will need to file an Application for Associate’s degree in the Evaluations Office (Morris Memorial Building Room 107) after enrolling in courses for the semester in which you intend to graduate. Requirements may be completed during any semester or summer session. Please note the graduation ceremony is held only at the end of spring semesters. Certification of general education requirements for transfer: CSU and UC systems accept full certification or subject-area certification upon completion of lower-division GE requirements. When applying to the transfer institution and requesting MJC transcripts, students should request GE certification.

*Students who possess a baccalaureate or higher degree completed at a regionally accredited college or university will have satisfied general education and competency requirements including guidance and activities for AA or AS Degree.
What is Career & Technical Education?

If you have visions of working in a skilled trade, occupation, or area in the community, you might consider the Career and Technical Education pathway. This educational pathway allows you to earn a Certificate of Achievement and/or an Associate’s degree which will give you targeted instruction and hands-on training for employment. Either award you choose will prepare you for employment in the community.

Associate’s Degree or Certificate of Achievement?

Your educational experience will vary depending on which award you target in the Career and Technical Education pathway. The certificate requirements are designed to provide you a fast, immersive learning experience in a skilled trade or vocation. The associate’s degree in Career and Technical Preparation is geared to help you move swiftly through MJC’s general education requirements (MJC-GE) for an associate’s degree and to immerse yourself in learning a trade or vocation so that you have an associate’s degree and evidence of skills in a trade. Upon completion of your degree, you will not only have completed general education component, you will have considerable knowledge and skills in a specific area of study. This plan is most beneficial for individuals who would like to explore career opportunities upon earning their associate’s degrees, and who may not have plans to earn a bachelor’s degree.

Career Options

MJC provides an array of associate’s degrees that can prepare you for jobs in the community. Programs like nursing, welding, administration of justice, business administration, and dairy science are designed with input from local employers to give you the training local employers are seeking. For more information on available programs, see page 70.

Choosing Courses

Course numbers can tell you a great deal about the type of course you are completing. Courses numbered 50-399 will apply toward your Associate’s degree if you are completing the Career and Technical Education pathway. The MJC-GE pattern includes courses numbered 50 and higher, whereas the Transfer General Education patterns only include courses numbered 100 to 299 for the purposes of transfer.

Types of Associate’s Degrees

The Career and Technical Education pathway is unique in that it offers two types of Associate’s degrees; Associate of Science (AS) and Associate of Arts (AA). The AS degree requires more coursework in the major (minimum 30 units) and fewer electives to total 60 units for an Associate’s degree. The AA degree requires a minimum of 20 units in the major, and therefore allows you to complete more elective units outside the major for the degree.

Is a Bachelor’s Degree in Your Future?

If you think that you may want to pursue a Bachelor’s degree at any point in the future, be sure to meet with a counselor to evaluate your goals. Not all courses completed for the Career and Technical Education pathway will transfer to a four-year university.

See page 67 for a list of career-oriented associate’s degrees and certificates of achievement.
SUCCESSFULY complete the following steps to earn a Certificate of Achievement or Associate’s degree from Modesto Junior College. Enroll in a Guidance class and meet with a counselor to ensure that you complete each step accurately and efficiently. You may earn a Certificate of Achievement and an Associate’s degree in many programs; however only one degree (AA or AS) can be awarded in any one program. To learn more about the Career & Technical Education pathway, see page 70.

**Earn a Certificate of Achievement:**

1. **Select a Certificate of Achievement** from the catalog and complete the requirements as listed.
2. **Earn a grade of C or better** in every course in the Certificate of Achievement.
3. **Apply for your Certificate.** The Certificate of Achievement is not automatically awarded when you complete the requirements. File an application for Certificate of Achievement during the same semester in which you plan to finish requirements (Evaluations Office, Morris Memorial Building, Room 107).

**Earn an Associate’s degree:**

1. **Complete 60 units in courses numbered 50 to 399** Twelve (12) units must be completed “in-residence” at MJC.
2. **Earn an overall GPA of 2.0 or higher** (C average) based on all work attempted in college courses numbered 50 to 399.
3. **Demonstrate competence in reading, writing, and mathematics.*

- **READING:** Meet one of the following requirements:
  - Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0)
  - Completion of READ 184 with a C or better

- **WRITING:** Meet one of the following requirements:
  - Completion of ENGL 101 or equivalent course from another institution with a C or better
  - Score of 3, 4, or 5 on AP Exam: Language & Composition OR Literature & Composition

- **MATHEMATICS:** Meet one of the following requirements:
  - Eligibility for entrance into any 100-level MATH course through MJC Assessment Process
  - Score of 3, 4 or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics
  - Completion of MATH 80 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher.

4. **Complete the MJC Guidance and Activities Requirements** as part of the 60 units required for associated degree. See page 74.
5. **Fulfill the general education requirement** as part of the 60 units required for associated degree: by completing the MJC-GE Pattern (page 75) with a GPA of 2.0 or higher.
6. **Complete a MAJOR** from those listed in the catalog from which you plan to earn your degree:
   - **Associate of Arts Degree (AA)** (Minimum 20 units in the major):
     - Complete requirements for any AA Major listed in the MJC Catalog. Your AA degree will be in that major.
   - **Associate of Science Degree (AS)** (Minimum 30 units in the major):
     - Complete requirements for any AS Major listed in the MJC Catalog. Your AS degree will be in that major.

7. **Earn a grade of C or Better** for every course in the major.
8. **Apply for your degree.** The Associate of Arts Degree (AA) and the Associate of Science Degree (AS) are not automatically awarded when you complete the requirements. File an Application for Associate’s degree in the Evaluations Office, Morris Memorial Building, Room 107, the same semester in which you plan to complete the requirements. Requirements may be completed during any semester or summer session. The graduation ceremony is held only at the end of the spring semester.

*Students who possess a baccalaureate or higher degree completed at a regionally accredited college or university will have satisfied general education and competency requirements including guidance and activities for AA or AS Degree.
What is the MJC Honors Program?

If you are a highly motivated or an accomplished student and would like your education at MJC to prepare you to compete well at the highest university levels, then the MJC Honors Program may be for you. This program is meant to further promote excellence by honing the skills and talents of our intellectually gifted, uniquely creative, and/or academically committed students. Honors students are challenged and guided by honors faculty to delve deeper, think more critically, and argue more persuasively. These students also have the opportunity to meet other gifted students and experience the spirit and encouragement of such a like-mindedly determined cohort.

What are the benefits of participating in the MJC Honors Program?

Besides the experience of an enhanced education and being better prepared to compete at the university level, students who graduate from the program will gain any number of perks through enhanced transfer agreements.

- **HONORS PROGRAM BENEFITS**
  - Priority admission and registration at transfer institutions
  - Scholarships granted by some CSU and UC institutions
  - Continuation of the honors experience at the transfer institution
  - Invitations to College and university and receptions and special events
  - Guaranteed housing
  - Priority admission to English 101 at MJC for students who meet appropriate Honors Program deadlines

What are Honors units?

Honors units are units of coursework that you complete in order to demonstrate that you are academically competent in strategically challenging courses. Honors Units are not additional units to be completed, but rather overlap your existing educational plan. You will work with a counselor and the Honors Program Coordinator to select appropriate courses. There are two ways to earn such units.

- **HONORS CONTRACTS**
  - Many instructors at MJC are willing to give you individual attention by enhancing a course to be at honors level. Once an agreement is established this is referred to as an honors contract. Once you are accepted into the honors program, you will be expected to initiate contracts with instructors. A list of participating instructors is available from the Honors Program Coordinator. Honors contracts may only be established in 3 unit or more courses numbered 100-299 (transferable).
  - **HONORS COURSES**
    - Honors courses are developed from courses which appear on the IGETC transfer pattern. Each semester certain courses will offer a section of a course at honors level in a seminar format, meaning there will be a great deal of facilitated discussion. Enrollment will be limited to 25 students, with honors program participants getting preferred registration.
  - **PROOF OF PARTICIPATION**
    - Honors courses completed will be noted on your official MJC transcript.

To apply to the program:

1. Make an appointment with the Honors Program Coordinator in Founders Hall 173
2. Download and complete an Honors Program Application packet at [www.mjc.edu/honors](http://www.mjc.edu/honors). In this application you will need to demonstrate the following*:
   - Eligibility for English 101 or higher at time of application
   - .25 community college GPA (12 units) or 3.5 credentialed High School GPA or recent 1050 SAT or recent 25 ACT
   - One letter of recommendation (see application)
   - One ‘statement of purpose’ 500 word-essay (see application)
3. Attend honors orientation before starting your first honors semester.

* If you have not recently attended community college or high school, or if you do not meet the entrance requirements, see the honors coordinator for alternate requirements.

To maintain enrollment:

1. Complete English 101 by the end of your first honors semester.
2. Maintain a 3.25 or higher cumulative GPA
3. Attempt at least one honors contract or course per year.

To complete the program:

1. Complete 15 units of honors coursework
2. Maintain a 3.25 cumulative GPA
3. File an application to graduate from the Honors Program
4. Complete an Honors Program Experience Survey
### Educational Goal

- **Career and Technical Education A.A. or A.S. (non-transfer)**
- **University Prep A.A. Emphasis**
- **Certificate/Skills Recognition**

#### Graduation Requirements

<table>
<thead>
<tr>
<th>Met</th>
<th>Assessment Tests</th>
<th>Basic Skills Needed</th>
<th>Competency Requirements</th>
</tr>
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<tbody>
<tr>
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</tbody>
</table>

#### A.A./A.S. Non-Transfer

**General Ed.**
- Met
  - A. Natural Sciences (3)
  - B. Social Sciences (3)
  - C. Humanities (3)
  - D.1 English Composition (3)
  - D.2 Comm. & Anal. Thinking (3)
  - E. Health Education (3)

**Major Requirements:**
- A.A. 20; A.S. 30 units

---

#### A.A. Cal. State Univ.

**General Ed.**
- Met
  - Area A (9)
    - A.1
    - A.2
    - A.3
  - Area B (9)
    - B.1
    - B.2
    - B.3 (w. B.1 or B.2)
  - Area C (9)
    - C.1
    - C.2
    - C.1 or 2
  - Area D (9 units, from areas 0-9)
  - Area E (3)
    - E.1

**U.S. History, Const. & Amer. Ideals 6 units required**

---

#### A.A. IGETC UC or CSU

**General Ed.**
- Met
  - 1. English Comp. (6-9)
    - A. English 101
    - B. 
    - C. (CSU Only)
  - 2. Math/Quant. Reasoning (3)
  - 3. Arts & Humanities (9)
    - a. 
    - b. 
    - a. or b.
  - 4. Social & Behav. Sci. (9)
  - 5. Physical/Biological Sci. (7)
    - a. 
    - b. 

**Foreign Language (UC only)**
- U.S. History, Const. & Amer. Ideals (CSU Only) 6 units required

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**Notes**

- (18 units required for A.A)

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**Transfer Major prep**
- Refer to www.assist.org

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**Tentative Program**

<table>
<thead>
<tr>
<th>Term</th>
<th>Units</th>
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**Catalog Rights**
- 6/08

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**COUNSELOR ___________________________________**

**DATE ___________________**

**NAME _____________________________________________**

**W# _______________**

---

**EDUCATIONAL GOAL**

- Reading
- English
- Math

---

**E. Health Education (3)**

- Ideals 6 units req.
- U.S. History, Const. & Amer. Ideals (UC only) 6 units req.

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**Notes**

- Major
- Education Plan
- Transfer Univ.
- Ideals
- U.S. History, Const. & Amer. Ideals
- Eng.
- Math
- CalWORKS
- Veteran
Students who plan to earn an Associate's degree must complete the MJC Guidance & Activities Requirements. By completing the Guidance Requirement, students will learn about MJC's requirements for graduation, various educational and career options, resources at MJC, as well as prepare an Educational Plan to ensure that the courses taken at MJC are appropriate for their short and long-term goals. By completing the Activities Requirement, students will participate in courses that demonstrate creativity, collaboration, teamwork, and/or self-expression. Students who possess a baccalaureate or higher degree completed at a regionally accredited college or university will have satisfied general education and competency requirements including guidance and activities for the Associate of Arts or Associate of Science degree.

I. Guidance Requirement: Complete one course (which should be completed during first semester).

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AG 115</td>
<td>Intro to Ag Education &amp; Careers (1)</td>
<td>F02</td>
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<tr>
<td>ARCH 100</td>
<td>Intro to Engineering &amp; Arch. (1)</td>
<td>F02</td>
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<tr>
<td>AUBDY 115</td>
<td>Intro Tech Industries (1)(F02)</td>
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<tr>
<td>AUTEC 115</td>
<td>Intro Tech Industries (1)(F02)</td>
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<tr>
<td>ENGR 100</td>
<td>Intro to Engineering &amp; Arch. (1) (F02)</td>
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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>GUIDE 109</td>
<td>Orientation for Foreign Students (1)</td>
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<tr>
<td>GUIDE 110</td>
<td>Educational Planning (1/2)</td>
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<tr>
<td>GUIDE 111</td>
<td>Career Awareness (1)</td>
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<tr>
<td>GUIDE 112</td>
<td>Job Development Skills (1/2)</td>
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<tr>
<td>GUIDE 116</td>
<td>Orient for Re-Entry Adults (2)</td>
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<tr>
<td>GUIDE 120</td>
<td>Success Strat for Transfer Students 3 (F99)</td>
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<tr>
<td>INTEC 115</td>
<td>Intro Tech Industries (1)(F02)</td>
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<tr>
<td>STSK 78</td>
<td>College Study Skills (3)(F02)</td>
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II. Activities Requirement: Complete two (2) units

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<th>Course Code</th>
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<tr>
<td>AG 100A/B</td>
<td>Leadership in Agriculture (1-2)(F98)</td>
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<tr>
<td>AR 102</td>
<td>Intro to Computer Graphics (3)</td>
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<tr>
<td>AR 108</td>
<td>Ceramics 1 (3)</td>
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<tr>
<td>AR 109</td>
<td>Ceramics 2 (3)</td>
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<tr>
<td>AR 110</td>
<td>Ceramics 3 (3)</td>
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<tr>
<td>AR 120</td>
<td>Basic Drawing 1 (3)</td>
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<tr>
<td>AR 121</td>
<td>Basic Drawing 2 (3)</td>
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<tr>
<td>AR 123</td>
<td>Figure Drawing (3)</td>
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<tr>
<td>AR 125</td>
<td>Color &amp; Design (2)</td>
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<tr>
<td>AR 127</td>
<td>Alternative Drawing Methods (3) (SU07)</td>
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<td>AR 140</td>
<td>Sculpture 1 (3)</td>
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<td>AR 141</td>
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<td>AR 142</td>
<td>Sculpture 3 (3)</td>
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<td>AR 144</td>
<td>Watercolor Painting 1 (3)</td>
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<td>AR 145</td>
<td>Watercolor Painting 2 (3)</td>
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<td>AR 146</td>
<td>Mixed Media Painting (3)(F05)</td>
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<td>AR 147</td>
<td>Painting 1 (In Acrylic) (3) (F06)</td>
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<tr>
<td>AR 148</td>
<td>Painting 1 (In Oil) (3)</td>
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<tr>
<td>AR 149</td>
<td>Painting 2 (3)</td>
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<tr>
<td>AR 150</td>
<td>Gallery Operation &amp; Management (3)</td>
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<tr>
<td>AR 170</td>
<td>Basic Photography (3)</td>
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<tr>
<td>AR 173</td>
<td>Digital Imaging for Photographers (3)(F02)</td>
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<td>AR 175</td>
<td>Color Photography (3)</td>
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<tr>
<td>AR 179</td>
<td>Photomotional (3) (SU07)</td>
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<tr>
<td>AR 181</td>
<td>Basic Photography (1)(SU04)</td>
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<tr>
<td>AR 182</td>
<td>Basic Photography 2 (1/2)(F04)</td>
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<td>AR 186A</td>
<td>Photography Lab Tech (1-2)(F96)</td>
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<td>AR 191</td>
<td>Photography Lab Technology 2(1)(F01)</td>
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<tr>
<td>CGR 201</td>
<td>Graphic Arts Fundamentals (3) (F06)</td>
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<td>CGR 211</td>
<td>Typography 1 (3) (F06)</td>
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<td>CGR 212</td>
<td>Electronic Prepress (3)(F06)</td>
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<td>CGR 221</td>
<td>Image Capture &amp; Manip (3)(F06)</td>
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<td>CGR 224</td>
<td>Elec Publishing Systems (3)(F06)</td>
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<td>CGR 230</td>
<td>Graphic Design (3)(F06)</td>
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<td>CGR 333</td>
<td>Photo Techniques (3)(F06)</td>
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<td>CMPGR 202</td>
<td>Intro to Computer Graphics (3)(F97)</td>
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<td>CMPGR 262</td>
<td>Exploring the WWW (1)</td>
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<td>CMPGR 284</td>
<td>Desktop Video Animation (3)</td>
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<td>ENGL 105</td>
<td>Creative Writing: Poetry (3)</td>
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<tr>
<td>ENGL 106</td>
<td>Creative Writing: Short Fiction(3)</td>
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</tr>
<tr>
<td>ENGL 108</td>
<td>Creative Writing: Autobiography (3)</td>
<td></td>
</tr>
</tbody>
</table>

Legend

- **Veterans or reservists** who submit proof of U.S. military Basic Training will receive two (2) units of activities. File copy of DD214 with MJC Veterans Office.

- **(F) Students completing this course prior to term (F: Fall, S: Spring, SU: Summer) and year indicated will not be allowed to fulfill this requirement with this course.**

- **^ Although listed in more than one area, the course may be counted toward only one MJC-GE pattern area.**
The MJC-GE pattern constitutes a set of requirements that, when successfully completed, demonstrates that the student has completed the general education requirement for associate degree at MJC. Completion of the MJC-GE pattern does not satisfy requirements for transfer to UC or CSU. Students are strongly advised to enroll in a Guidance class and/or speak to a counselor to ensure that the MJC-GE pattern is right for their short and long range educational goals. For more information see page 70 of the 2009-2010 MJC Catalog.

### Area A. Natural Sciences:

Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AG 376</td>
<td>Basic Sci &amp; Lab Technics (3)</td>
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<tr>
<td>ANAT 125</td>
<td>Human Anatomy (5) (SU07)</td>
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<tr>
<td>ANTH 106</td>
<td>Into to Animal Science (3)</td>
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<tr>
<td>ANTH 107</td>
<td>Physical Anthropology (3)</td>
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<tr>
<td>ANTH 108</td>
<td>Physical Anthro Lab (1)/(F98)</td>
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<tr>
<td>AP 50</td>
<td>Elem Human Anatomy \&amp; Physiology (3)/F00</td>
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<tr>
<td>AP 150</td>
<td>Integrative Anat \&amp; Physiology (5)</td>
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<tr>
<td>ARST 110</td>
<td>Intro to Astrophysics (3)</td>
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<tr>
<td>ARST 115</td>
<td>Intro to Modern Astronomy (3)</td>
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<tr>
<td>BUSAD 210</td>
<td>Business Communication (3)</td>
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<tr>
<td>BUSIE 231</td>
<td>Basic Sci (3)/F97</td>
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<tr>
<td>BUSIE 101</td>
<td>Biological Principles (5)</td>
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<td>BIO 105</td>
<td>General Biology (4)</td>
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<tr>
<td>BIO 110</td>
<td>Genetics, Evolution \&amp; Society/(3)/F97</td>
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<tr>
<td>BUSIE 152</td>
<td>Bio (3)</td>
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<tr>
<td>BUSIE 110</td>
<td>Earth Science (4)</td>
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<tr>
<td>BUSIE 115</td>
<td>Intro to Oceanography (4)</td>
</tr>
</tbody>
</table>

### Area B. Social \\& Behavioral Sciences:

Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>Intro to Admin of Justice (3)</td>
</tr>
<tr>
<td>ADJU 235</td>
<td>Introduction to Corrections (3)/(SU07)</td>
</tr>
<tr>
<td>AGEC 146</td>
<td>Agr, Environm \&amp; Soc (3)/(F97)</td>
</tr>
<tr>
<td>ANTH 102</td>
<td>Cultural Anthropology (3)</td>
</tr>
<tr>
<td>ANTH 103</td>
<td>History of World Relig (3)</td>
</tr>
<tr>
<td>ANTH 140</td>
<td>Magic, Witchcraft \&amp; Religion (3)/(F97)</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>Principles of Mgmt (3)</td>
</tr>
<tr>
<td>CLEADV 103*</td>
<td>Child Growth \&amp; Devt (3)/(SU09)</td>
</tr>
<tr>
<td>CLEADV 110</td>
<td>Child Growth \&amp; Devt Lab (1)/(SU09)</td>
</tr>
<tr>
<td>CLDDV 110</td>
<td>History of Western Civ (3)</td>
</tr>
<tr>
<td>BUSIE 152</td>
<td>Bio (3)</td>
</tr>
<tr>
<td>BUSIE 151</td>
<td>Earth Science (4)</td>
</tr>
<tr>
<td>BUSIE 121</td>
<td>Intro to Oceanography (4)</td>
</tr>
</tbody>
</table>

### Area C. Humanities:

Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 104</td>
<td>Lang,\ Culture \&amp; Comm, (3)/(SU07)</td>
</tr>
<tr>
<td>ARCH 109</td>
<td>History of Architecture (3)</td>
</tr>
<tr>
<td>ARCH 171</td>
<td>History of Architecture (3)</td>
</tr>
<tr>
<td>ART 101</td>
<td>Color \&amp; Design 1 (3)/(SU07)</td>
</tr>
<tr>
<td>ART 100</td>
<td>Art Appreciation (3)</td>
</tr>
<tr>
<td>ART 161</td>
<td>American Art (3)</td>
</tr>
<tr>
<td>ART 162</td>
<td>History of Renaissance Art (3)</td>
</tr>
<tr>
<td>ART 163</td>
<td>History of Modern Art (3)</td>
</tr>
<tr>
<td>ART 164</td>
<td>History of Art 1 (3)</td>
</tr>
<tr>
<td>ART 165</td>
<td>History of Art 2 (3)</td>
</tr>
<tr>
<td>ART 167</td>
<td>Survey of Photography</td>
</tr>
<tr>
<td>ART 169</td>
<td>History of Non-Western Art(3)/(F99)</td>
</tr>
<tr>
<td>CMGR 201</td>
<td>Animation, Global View (3)</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Adv. Comp. \&amp; Intro to Lit. (3)/(SU07)</td>
</tr>
<tr>
<td>ENGL 114</td>
<td>Introduction to Poetry (3)</td>
</tr>
<tr>
<td>ENGL 116</td>
<td>Drama (3)</td>
</tr>
<tr>
<td>ENGL 131</td>
<td>Intro to Writing/English (3)</td>
</tr>
<tr>
<td>ENGL 132</td>
<td>Intro to World Lit 1500 to Prsent(3)</td>
</tr>
<tr>
<td>ENGL 135</td>
<td>American Lit to 1850 (3)</td>
</tr>
<tr>
<td>ENGL 136</td>
<td>American Lit to 1850 (3)</td>
</tr>
<tr>
<td>ENGL 137</td>
<td>Survey Engl Lit 18th Ctrty to Prsent(3)</td>
</tr>
<tr>
<td>ENGL 151</td>
<td>Introduction to Folklore (3)</td>
</tr>
<tr>
<td>ENGL 156</td>
<td>Bible as Lit-Herb Canon (3)</td>
</tr>
</tbody>
</table>

### Area D. Language \\& Rationality:

Complete D1 and D2 as indicated for six (6) units.

#### D1. English Composition:

Complete a minimum of three (3) units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGR 254</td>
<td>Publishing on WWW (3)/(F07)</td>
</tr>
<tr>
<td>CMGR 265</td>
<td>Multimedia on WWW (3)/(F07)</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition \&amp; Reading (3)</td>
</tr>
<tr>
<td>ENGL 111</td>
<td>Intro to Native American Lit (3)</td>
</tr>
</tbody>
</table>

#### D2. Comm. \\& Analytical Thinking:

Complete a minimum of three (3) units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computing Apps (3)/(SU09)</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>Business Communication (3)</td>
</tr>
<tr>
<td>MATH 90</td>
<td>Intermediate Algebra (5)</td>
</tr>
<tr>
<td>MATH 100</td>
<td>Math Ideas \&amp; Applications (3)</td>
</tr>
<tr>
<td>MATH 112</td>
<td>Calculus: 2nd Course (5)/(SU08)</td>
</tr>
</tbody>
</table>

### Area E. Health Education:

Complete a minimum of three (3) units:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 103*</td>
<td>Child Growth \&amp; Devt (3)/(SU08)</td>
</tr>
<tr>
<td>CLDDV 105</td>
<td>Growth \&amp; Devt Lab (3)/(SU08)</td>
</tr>
<tr>
<td>CMGR 203</td>
<td>Technical Social/Comp (3)/(SU07)</td>
</tr>
<tr>
<td>CMGR 241</td>
<td>Assembly Lang Program (5)</td>
</tr>
<tr>
<td>CMGR 248</td>
<td>Problem Solv \&amp; Prog Design (3)</td>
</tr>
<tr>
<td>CMGR 224</td>
<td>Pub Comp \&amp; Critical Thinking</td>
</tr>
<tr>
<td>CMGR 230</td>
<td>Adv Comp \&amp; Critical Thinking</td>
</tr>
<tr>
<td>CMGR 235</td>
<td>Calc for Bus \&amp; Soc Sci (3)</td>
</tr>
<tr>
<td>CMGR 236</td>
<td>Intro to Progl \&amp; Prac (3)</td>
</tr>
</tbody>
</table>

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*Veterans or reservists who submit proof of U.S. Military Basic Training will receive three (3) units of health education. File copy of DD214 with MJC Veterans Office.

*Allied Health Majors (ADN, VN) satisfy the Health Ed requirement by completion of major requirements.

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* Rev 02/24/09 RAC/lbs

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### B.1 PHYSICAL SCIENCE (continued)

- CHEM 150-164* Exploring Chem Environ/Lab(3-1)(F07)
- EASCI 161* Earth Science (4)
- EASI 162* Introduction to Oceanography(4)(F07)
- GEOG 101 Physical Geography (3)
- GEOL 160 Intro to Geology (3) (F95)
- GEOL 161* Physical Geography (4) (F90)
- GEOL 165 Geol of California (3)
- GEOL 166* Historical Geol (4) (F90)
- METEO 160 Intro to Wthr & Climate (3)
- METEO 160-151* Intro to Meteorology/Lab (3-1)
- PHYS 101* Gen Phys: Mechanics (4)
- PHYS 102* Gen Phys: Waves, Therm, Optics (4)
- PHYS 142* Mech, Heat & Waves (4)
- PHYS 143* Electricity, Magnetism, Optics... (4)
- PHYS 160 Describe Intro to Physics (3)
- PHYS 160-164* Describe Intro to Physics/Lab (3-1) (F97)
- PHYS 165* Introductory Physics (5)
- PHYS 180* Conceptual Physics: Hands On (4)(F07)

### B.2 LIFE SCIENCE

- ANAT 125* Human Anatomy (5)
- ANSC 200 Intro to Animal Science (3) (S06)
- ANTHR 101* Phys Anthropology (3) (F90)
- ANTHR 101-105*Phys Anthro/Lab (3-1) (F90)(F98)
- AP 150* Integr Anat/Physio (5) (F96)
- BIO 101* Biological Principles (5)
- BIO 111* General Biology (4)
- BIO 115 Genetics, Evol & Soc (3) (F97)
- BIO 130 Introduction to Marine Vertebrates (3) (S07)
- BIO 130-130L* Introduction to Marine Vert/Lab (3-1) (S07)
- BIO 140* Intro to Marine Biology (4)
- BIO 145* Intro to Freshwater Biology (4)
- BOT 101* General Botany (4)
- BOT 110* Plant Biology (3)
- ENSCI 108 Env. Conservation (3) (F97)
- MICRO 101* Microbiology (4) (F94)
- PHYSIO 101* Intro Human Physio (5)
- PHYSO 103 Introduction to Neuroscience (3)(SU08)
- PLSC 200 Intro to Plant Science (3)(SU04)
- PSYCH 103 Introduction to Neuroscience (3)(F90)
- ZOOL 101* General Zoology (4)
- ZOOL 110* Animal Biology (3)

### B.3 LABORATORY

Take one course from B.1 or B.2 with a laboratory as indicated by the asterisk (*).

### B.4 QUANTITATIVE REASONING AND MATHEMATICS (continued)

- MATH 101 Math ideas and Applications (3) (F90)
- MATH 105 Structure of Mathematics (4) (F90)
- MATH 106 Structure of Mathematics (2) (4) (F93)
- MATH 111 Applied College Algebra (3) (F02)
- MATH 121 Pre-Calculus (1) (F98)
- MATH 122 Pre-Calculus (2) (F98)

### ARENA C

**Nine (9) units required.** Three (3) units from C.1 and three (3) units from C.2. Three (3) additional units from C.1 or C.2.

#### C.1 ARTS

- ART 102 Intro to Computer Graphics (3)(F95)
- ART 120 Basic Drawing (1) (3)
- ART 140 Sculpture 1 (3)
- ART 160 Appreciation of Art (3)
- ART 161 American Art (3) (F90)
- ART 162 History of Renaissance Art (3) (F92)
- ART 163 History of Modern Art (3) (F94)
- ART 164 History of Art 1 (3)
- ART 165 History of Art 2 (3)
- ART 166 Survey of Photography (3)
- ART 169 History of Non-Western Art (3)(F99)
- ART 170 Basic Photography (3) (F99)
- CMPSC 202 Intro to Computer Graphics (3)(F95)
- ENGL 161* Film Appreciation (3) (F05)
- FILM 154 Movies with a Message (3)(F07)
- FILM 155 The Documentary Film (3)(SU07)
- INTDS 150 Hist. of Interiors-Dec. Arts 1 (3) (SU07)
- MUSG 101 Music Appreciation (3)
- MUSG 102 Intro to World Music (3)(F99)
- MUSG 111 Intro to Amer Pop Music (3)
- MUSG 121 History of Western Music (1) (S05)
- MUSG 122 History of Western Music 2 (3) (F93)
- MUST 123 Music Theory 3 (3) (F93)
- PE 194 Intro to World Dance (3) (F01)
- SOCS 127 Official Read & Interpretation (3)
- SPCC 122 Oral Reading & Interpretation (3)
- SPCC 123 Storytelling (3)(F00)
- SPCC 124 Advanced Readers’ Theatre (3)
- THER 100 Intro to Theatre Arts (3)
- THER 102 World Theatre (3) (F05)
- THER 120 Oral Read & Interp(3)
- THER 122 Intro to Readers’ Thet (3)
- THER 123 Storytelling (3)(F00)
- THER 124 Advanced Readers’ Theatre (3)
- THER 150* Elements of Playwriting (3) (F94)
- THER 160* Fundamentals of Acting (3)
- THER 161 Intermediate Acting (3)
- THER 165 History of American Music Theater(3)(F92)
- THER 194 Intro to World Dance (3) (F01)
C.2 LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE

ANTHR 104* Language, Culture and Comm. (3)(SU07)
ENGL 102 Adv Comp & Intro to Lit (3)
ENGL 105 Creative Writing: Poetry (3)
ENGL 106 Creative Writing: Short Fiction (3)
ENGL 112 Intro to Novel & Shrt Story (3)
ENGL 114 Intro to Poetry (3)
ENGL 116 Intro to Drama (3)
ENGL 131 Intro to World Lit to 1500 (3)
ENGL 132 Intro to World Lit 1500 to Present (3)
ENGL 135 American Lit to 1850 (3)
ENGL 136 Am. Lit 1850 to Present (3)
ENGL 137 Survey of Eng Lit 10th Century (3)
ENGL 138 Survey of Eng Lit 18th-19th Century (3)
ENGL 151 Introduction to Folklore (3)
ENGL 156 Bible as Lit - Hebrew Canon (3)
ENGL 157 Bible as Lit - New Testament (3)
ENGL 161* Film Appreciation (3)(F05)
ENGL 162 History of Cinema (3)(F03)
ENGL 163 Intro to Shakespeare (3)
ENGL 166 Adolescent Lit (3)(F90)
ENGL 169 Children’s Lit (3)
ENGL 171 Intro African-Amer Lit (3)(F90)
ENGL 172 Intro to Chicano Lit (3)(F93)
ENGL 173 Latin Amer Lit (3)(F93)
ENGL 174 Intro Modern Asian Lit (3)(SU07)
ENGL 175 Introduction to Women’s Literature (3)(F07)
ENGL 176 Intro to Mexican Lit (3)(F04)
ENGL 179 Intro to Nv Amer Lit, Myth & Oral Trad (3)(F95)
ENGLISH LANGUAGE numbered 101, 102, 103, 104
HIST 106* World Civil. to the 16th Century (3)(S07)
HUMAN 101 Intro to the Humanities (3)
HUMAN 105 Early Humanistic Trad (3)(F88)
HUMAN 106 Humanities in the Modern World (3)(F89)
HUMAN 110 East Meets West (3)(F87)
HUMAN 130 Introduction to Western Religions (3)(F03)
HUMAN 140 Intro to World Mythologies (3)(S06)
PHIL 101 Philosophy (3)
PHIL 110 Ethics: Theory & Appl (3)
PHIL 113 Philosophy of Art (3)(SU07)
PHIL 115 Religion: A Phil. & Comparative Inquiry (3)
PHIL 117 Adv Phil. (3)(SU07)
PHIL 118 History of Philosophy (3)(SU07)
PHIL 123 20th Century Philosophy (3)(SU07)
PHIL 140 Philosophy & Film (3)(F90)
SIGN 125 ASL - Beginning (3)(F95)
SIGN 126 ASL - Intermediate (3)(F95)
SIGN 127 ASL - Advanced (3)(F95)
SPAN 109 Span. for Span. Spkr: Fund. (4)(SU07)
SPAN 110 Span. for Span. Spkr: Interm. (4)(SU07)
SPAN 112 Intro to Chicano/a Lit (3)(F90)
SPAN 173 Survey of Latin American Lit (3)(S06)
THER 150h Elem of Playwriting (3)(F94)

D.1 ANTHROPOLOGY & ARCHAEOLOGY

ANTHR 101* Physical Anthropology (3)(F90)
ANTHR 102 Cultural Anthropology (3)
ANTHR 104* Language, Culture and Comm. (3)(SU07)
ANTHR 130 Arch and Cultural Prehist (3)
ANTHR 140 Magic, Witch & Relig (3)(F97)
ANTHR 150 Native People of N. Amer (3)

D.2 ECONOMICS

AGEC 210 Elem. of Ag Econ (3)(F98)
ECON 101 Principles of Macroeconomics (3)
ECON 102 Econ Princ: Microeconomics (3)
ECON 115* Econ Hist of the US (3)
EGEO 105* Economic Geog (3)(F00)
HIST 115* Econ Hist of the US (3)

D.3 ETHNIC STUDIES

HIST 125* History of Mexico (3)
HIST 145* Latin American History (3)
HIST 154* Afr. Amer thru 19th Century (3)(F95)
HIST 155* Afr. Amer in 20th/21st Cents. (3)(F99)
SOCI 150* Ethnicity and Culture in America (3)
SOCI 154* Afr.-Amer Culture & Communities (3)
SOCIO 156* Mix Culture in the US (3)
SPCOM 130* Interpersonal Communication (3)(F02)

D.4 GENDER STUDIES

INDIS 105 Intro to Women’s Studies (3)(F96)
POLSC 151* Women and Politics (3)(F04)
PSYCH 111* Psychology of Gender (3)(S07)
SOCIO 105 Women’s Studies (3)(F01)

D.5 GEOGRAPHY

EGEO 102 Cultural Geography (3)
EGEO 105* Economic Geog (3)(F00)
EGEO 110 World Regional Geog (3)(F97)

D.6 HISTORY

ECON 115* Econ Hist of the US (3)
HIST 101 History of US thru Reconstruction (3)
HIST 102 History of the US-Post Civil War (3)
HIST 104 Western Civilization (3)
HIST 105 Western Civilization (3)
HIST 106* World Civ. to the 16th Century (3)(F02)
HIST 107 World Civ. from the 16th Century (3)(F02)
HIST 112 Twentieth Century Amer (3)
HIST 113 Soc & Cult Hist of US Prior to 20th Cent (3)
HIST 115* Econ History of the US (3)
HIST 116 Women in Amer History (3)
HIST 119 Soc & Cult Hist 20th Cent Amer (3)(F90)
HIST 125* History of Mexico (3)
HIST 128 History of Amer Far Western Frontier (3)(F94)
HIST 129 History of California (3)
HIST 145* Latin Amer History (3)
HIST 154* Afr. Amer. thru 19th Cent (3)(F95)
HIST 155* Afr. Amer. in 20th/21st Cents. (3)(F99)

D.7 INTERDISCIPLINARY SOCIAL OR BEHAVIOR SCIENCE

AGGE 146 Ag. Envir & Soc. (3)(F97)
ENGL 178 Mass Media & the Public (3)(SU07)
ENSCI 110 Calif Water (3)(F98)
FAMLF 131* Family Relationships (3)
SPCOM 130* Interpersonal Communication (3)(F97)

D.8 POLITICAL SCIENCE, GOVERNMENT AND LEGAL INSTITUTIONS

PHILO 130 Political Theory (3)
POLSC 101 American Political (3)
POLSC 102 The Const. & the Rights of Americans (3)
POLSC 110 International Relations (3)
POLSC 111 War & Peace: From Lenin to Al Qaeda (3)
POLS 120 Calif Politics & Problems (3)

D.9 PSYCHOLOGY

PSYCH 101 General Psychology (3)
PSYCH 105 Abnormal Psychology (3)(S07)
PSYCH 111* Psychology of Gender (3)(S07)

Total Units required for General Education: 39

CSU GE Transfer Pattern

Six (6) units are needed to complete the US History & Government requirement for the BS degree. Three (3) units from Group a and three (3) units from Group b or six (6) units from Group c. Six (6) units may also be counted toward Area D.

Group a.
ECON 115 Econ Hist of US (3)(F04)
HIST 101 Hist. of US thru Reconstruction (3)(F04)
HIST 102 Hist of US Post Civil War (3)(F04)
HIST 112 Twentieth Cent. America (3)(F04)
HIST 113 Soc & Cult Hist US Prior to 20th Cent (3)(F04)
HIST 115 Econ Hist of US (3)(F04)
HIST 116 Women in Amer History (3)(F04)
HIST 119 Soc & Cult Hist 20th Cent Amer (3)(F04)
HIST 154 Hist of Afr Amer thru 19th Cent (3)(F04)
HIST 155 Hist Afr Amer 20th/21st Centuries (3)(F04)

Group b.
POLSC 101 American Politics (3)(F04)
POLSC 102 The Const. & Rights of Americans (3)(F04)
POLS 120 Calif Politics & Prob (3)(F04)

Group c.
HIST 101 Hist of the US thru Reconstruction (3)(F04)
HIST 102 Hist of the US Post Civil War (3)(F04)
AREA 1: English Composition
If you plan to attend CSU, choose 3 courses, 1 from each group. If you plan to attend UC, choose 2 courses, 1 from Group A, and 1 from Group B.

Group 1A: English Composition
One course, or three (3) semester units.
ENGL 101 Composition & Reading (3)

Group 1B: Critical Thinking/English Composition
One course, or three (3) semester units
PHILO 105 Reasoning (3)
PHILO 107 Philo of Science (3)(F93)
SPCOM 104 Argumentation (3)(F93)

Group 1C: Speech Communication (CSU ONLY)
One course, or three (3) semester units
SPCOM 100 Fund of Public Speaking (3)
SPCOM 102 Intro to Human Communication (3)
SPCOM 110 Persuasion (3)(S06)

AREA 2: Mathematical Concepts and Quantitative Reasoning
One course, or three (3) semester units
MATH 101 Math Ideas & Application (3)
MATH 111 Applied College Algebra (3)(F02)**
MATH 121 Pre-Calculus 1 (5)(F98)**
MATH 122 Pre-Calculus 2 (5)(F98)**
MATH 130 Finite Mathematics (3)
MATH 134 Elementary Statistics (5)
MATH 138 Calculus for Business/Soc Sci (3)**
MATH 171 Calculus: First Course (5)**
MATH 172 Calculus: Second Course (5)
MATH 173 Calculus: Third Course (5)(S07)
MATH 174 Intro-Linear Algebra Ord Diff Eq (5)(S07)

AREA 3: Arts and Humanities
For UC and CSU, choose at least three (3) courses/ nine (9) semester units. One course must be from 3A and one from 3B, & one additional course from either 3A or 3B.

Group 3A: Arts
ARCH 117 Hist of Architecture 1 (3)**
ARCH 118 Hist of Architecture 2 (3)**
ART 160 Appreciation of Art (3)
ART 161 American Art (3)
ART 162 Hist of Renaissance Art (3)(F95)
ART 163 History of Modern Art (3)(F95)
ART 164 History of Art 1 (3)
ART 165 History of Art 2 (3)
ART 169 Hist of Non-Western Art (3)(F99)
MUSG 101 Music Appreciation (3)
MUSG 102 Intro to World Music (3)(S07)
MUSG 111 Intro to American Popular Music (3)(S07)
MUSG 121 Hist of Western Music 1 (3)(S05)
MUSG 122 Hist of Western Music 2 (3)(S05)
MUST 121 Music Theory 1(3)
MUST 122 Music Theory 2 (5)
MUST 123 Music Theory 3 (3)
MUST 124 Music Theory 4 (3)
PE 194 Intro to World Dance (3)(S01)

Group 3B: Humanities
ANTHR 104 Language, Culture & Comm (3)(SU07)**
ANTHR 105 Adv Comp & Intro to Lit (3)(S07)
ANTHR 112 Intro Novel & Short Story (3)
ANTHR 114 Intro to Poetics (3)
ANTHR 116 Intro to Drama (3)
ANTHR 131 Intro to World Lit to 1500 (3)
ANTHR 132 Intro to World Lit 1500 to Present (3)
ANTHR 135 American Lit to 1850 (3)
ANTHR 136 American Lit 1850 to Present (3)
ANTHR 137 Survey of English Lit to 18th Cent(3)
ANTHR 138 Survey of English Lit 18th Cent.-Present (3)
ANTHR 151 Introduction to Folklore (3)(F01)
ANTHR 156 Bible as Lit: Hebrew Canon and... (3)
ANTHR 157 Bible as Lit: New Testament (3)
ART 161 Film Appreciation (3)(S05)
ART 162 History of Cinema (3)(F03)
ART 163 Intro to Shakespeare (3)
ART 168 Adolescent Literature (3)(S07)
ART 169 Children's Literature (3)(S07)
ART 171 African-Amer. Lit. (3)
ART 172 Intro to Chicano Lit (3)(F95)
ART 173 Intro to Latin American Lit (3)(F95)
ART 174 Intro to Modern Asian Lit (3)(S05)
ART 175 Introduction to Women's Literature (3)
ART 176 Intro to Mexican Literature (3)(S05)
ART 179 Intro Nat.Amer Lit-Myth-Oral Trad(3)(F99)
FREN 102 French 2 (5)(S07)
FREN 103 French 3 (5)
FREN 104 French 4 (5)
GERM 102 German 2 (5)(S07)
HIST 106 World Civ to 16th Century (3)(S07)**
HUMAN 101 Early Humanistic Traditions (3)
HUMAN 105 Early Humanistic Traditions (3)
HUMAN 166 Human in Modern World (3)
HUMAN 110 East Meets West (3)
HUMAN 130 Intro. to Western Religions (3)(S03)
HUMAN 140 Intro. to World Mythologies (3)(S06)
PHILO 101 Philosophy (3)
PHILO 111 Ethics: Theory & Appl (3)
PHILO 113 Philosophy of Art (3)(F07)
PHILO 115 Religion: Philo & Comp Inn (3)
PHILO 120 Hist of Philosophy: Ancient (3)
PHILO 121 Hist of Philosophy: Modern (3)
PHILO 123 Twentieth Century Philosophy (3)(F02)
PHILO 140 Philosophy & Film (3)(S07)
SPAN 103 Spanish 3 (5)(F92)
SPAN 104 Spanish 4 (5)(F92)
SPAN 112 Intro to Chicano/a Lit. (3) **
SPAN 173 Survey of Latin American Lit (3)(S06)

AREA 4: Social and Behavioral Sciences
At least three courses/nine (9) semester units in a minimum of two disciplines.

Group 4A: Anthropology & Archaeology
ANTHR 102 Cultural Anthropology (3)
ANTHR 104 Language, Culture & Comm (3)(SU07)**
ANTHR 130 Anthropology & Cult Prerest (3)
ANTHR 140 Magic, Witchcraft, & Religion (3)(S07)
ANTHR 150 Native People of North America (3)

Group 4B: Economics
ECON 101 Principles of Macroeconomics (3)
ECON 102 Econ Principles: Microeconomics (3)
ECON 115 Econ History of the US (3)**
HIST 115 Econ History of the US (3) **

Group 4C: Ethnic Studies
HIST 155 Afi-Amer in 20th & 21st Cent. (3)(F02)**

Group 4D: Gender Studies
POLSC 151 Women and Politics(3)(S04)**
PSYCH 111 Psychology of Gender (3)(S07)**

Group 4E: Geography
GEOG 102 Cultural Geography (3)
GEOG 103 Economic Geography(3)(S03)
GEOG 110 World Regional Geography (3)(S07)

Group 4F: History
HIST 115 Econ History of the US (3)**
HIST 101 Hist of the US through Reconstruction (3)
HIST 102 Hist of the US-Post Civil War (3)
HIST 104 Western Civilization (3)
HIST 105 Western Civilization (3)
HIST 106 World Civ. to the 16th Century (3)(F02)**
HIST 107 World Civ. from the 16th Century (3)(F02)
HIST 112 20th Century America (3)**
HIST 113 Soc/Crit Hist. of US prior to 20th Cent.(3)
HIST 115 Economic Hist. of the US ^
HIST 116 Women in American Hist (3)
HIST 119 Soc/Crit Hist. 20th Cent Amer (3)(F00)**
HIST 125 History of Mexico (3)
HIST 128 Hist. of American Far Wstrn Front (3)(F95)
HIST 129 History of California (3)
HIST 145 Latin American History(3)
HIST 154 Afi-Amer thru 19th Cent.(3)(F99)
HIST 155 Afi-Amer in 20 and 21st Cent. (3)(F02)**

Group 4G: Interdisciplinary, Social & Behavioral Sciences
ENS110 California Water (3)(F98)
FAML 131 Family Relationships (3)(S07)
SPCOM 130 Intercultural Comm. (3)(F97)

Group 4H: Political Science, Government & Legal Institutions
PHILO 130 Political Theory (3)**
POLSC 101 American Politics (3)
POLSC 102 Const & Rights of Americans (3)
POLSC 110 International Relations (3)
POLSC 111 War & Peace From Lenin to Al Qaeda (3)
POLSC 120 Calif Politics & Problems (3)
POLSC 130 Political Theory (3)**
POLSC 131 American Political Thought (3)(S07)
POLSC 140 Comparative Politics (3)
POLSC 145 Third World in Int'l Politics (3)(SU07)
POLSC 151 Women and Politics(3)(S04)**

Group 4I: Psychology
PSYCH 101 General Psychology (3)
PSYCH 104 Social Psychology (3)
PSYCH 105 Abnormal Psychology (3)(S07)
PSYCH 110 Human Sexualities (3)**
PSYCH 111 Psychology of Gender (3)(S07)**
PSYCH 141 Human Lifespan (3)**

Group 4J: Sociology & Criminology
ENGL 178 Mass Media and the Public (3)(SU07)
INDIS 105 Intro to Women's Studies (3)(S01)
SOCIO 101 Introduction to Sociology
SOCIO 102 Social Prob. in the US (3)(F99)
SOCIO 125 Sociology of the Family (3)
### AREA 5: Physical and Biological Sciences

Select at least two courses (7-9 semester units). Choose one course from 5A and one course from 5B required.

One course from 5A or 5B must be a laboratory marked with a single asterisk (*).

#### 5A. Physical Science

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>PHYSIC 101</td>
<td>Intro to Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIC 102</td>
<td>Intro to Physics w/lab</td>
<td>3</td>
</tr>
<tr>
<td>PHYSIC 103</td>
<td>General Chemistry 1 (5)</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIC 104</td>
<td>Physical Chemistry 2 (5)</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIC 105</td>
<td>General Chemistry 2 (5)</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIC 106</td>
<td>Geology of California (5)</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIC 107</td>
<td>General Chemistry 2 (5)</td>
<td>5</td>
</tr>
</tbody>
</table>

#### 5B. Biological Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 101</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>Intro to Animal Science</td>
<td>5</td>
</tr>
<tr>
<td>ANTHR 101</td>
<td>Physical Anthropology (5)</td>
<td>5</td>
</tr>
<tr>
<td>ANTHR 101A</td>
<td>Physical Anthropology w/lab</td>
<td>5</td>
</tr>
<tr>
<td>AP 150</td>
<td>Integrative Anat and Physio (5)</td>
<td>5</td>
</tr>
<tr>
<td>BIO 101</td>
<td>Biological Principles (5)</td>
<td>5</td>
</tr>
<tr>
<td>BIO 110</td>
<td>General Botany (4)**</td>
<td>5</td>
</tr>
<tr>
<td>BIO 115</td>
<td>Genetics, Evolution, and Society (3)</td>
<td>5</td>
</tr>
<tr>
<td>BIO 140</td>
<td>Intro to Marine Biology (4)**</td>
<td>4</td>
</tr>
<tr>
<td>BIO 145</td>
<td>Intro to Freshwater Biology (4)**</td>
<td>4</td>
</tr>
<tr>
<td>BOT 101</td>
<td>General Botany (4)**</td>
<td>4</td>
</tr>
<tr>
<td>BOT 110</td>
<td>Plant Biology (3) (SO)**</td>
<td>3</td>
</tr>
<tr>
<td>ENSCI 108</td>
<td>Environmental Conservation (3)</td>
<td>3</td>
</tr>
<tr>
<td>MICRO 101</td>
<td>Microbiology (4) (F95)</td>
<td>4</td>
</tr>
<tr>
<td>PHYSIO 103</td>
<td>Introduction to Human Physiology (5)**</td>
<td>5</td>
</tr>
<tr>
<td>PHYSIO 103</td>
<td>Introduction to Neuroscience (3)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 103</td>
<td>Introduction to Neuroscience (3)</td>
<td>3</td>
</tr>
</tbody>
</table>

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### Limitations of IGETC

IGETC is not recommended for certain UC colleges and majors. Please see IGETC Considerations on page 81 of the 2008-2009 Catalog.

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### AREA 6A (UC Only) Languages Other than English

Students transferring to UC are required to demonstrate competence (proficiency) in a language other than English equal to two years of high school study. Competence may be demonstrated through one of the following mechanisms:

1. Completion of two years of high school coursework (US high school or high school in a country where the language instruction is in English) in a language other than English, with a grade of B or C in each course. The two years must be in the same language.
2. Complete one of the following MJC courses with a grade of “C” or better. The more advanced courses can also be used to satisfy IGETC: 3B requirement.

#### FREN/GERM/SPAN/ITAL

- FREN 101
- GERMAN 101
- SPAN 101
- ITALIAN 101

3. Satisfactory completion of course(s) at a college or university with a grade of C or better in each course. For the purpose of IGETC Area 6, the appropriate course(s) that can be used to satisfy Area 6 is indicated on the approved IGETC list for each college.

4. Satisfactory completion, with grades of C or better, of two years of formal schooling at the 6th grade level or higher in an institution where the language of instruction is not English. Appropriate documentation must be presented to substantiate that the required coursework was completed. If an official sealed transcript cannot be obtained from a foreign institution an unofficial transcript may be used to verify proficiency. Students who cannot provide documentation should either pass one of the examinations or tests listed below in 5 through 11 or satisfactorily complete an appropriate language course at their college as outlined in 2 above.

5. Achieve a satisfactory score on the SAT Subject Test in languages other than English. If the test was taken before May 1995, the first score is the minimum; if the test was taken after May 1995, use the second score.

- Chinese with Listening: 500/520
- French/French with Listening: 500/520
- German/German with Listening: 500/510
- Hebrew (Modern): 500/470
- Italian: 500/520
- Japanese with Listening: 500/510
- Korean/Korean with Listening: 500/450
- Latin: 500/530
- Spanish/Spanish with Listening: 500/520

6. Achieve a score of 3 or better on a College Board Advanced Placement (AP) Examination in a language other than English.

7. Achieve a score of 5 or higher on an International Baccalaureate (IB) Higher Level Examination in a language other than English.

8. Satisfactory completion of achievement test (credit by exam) administered by a community college, university or other college in a language other than English. The test must assess the student proficiency at a level equivalent to at least two years of high school language. This conclusion must be posted on a transcript indicating unit, course title, and grade; or on a document with letterhead of the institution granting proficiency stating that the student has mastered proficiency in the language equivalent to two years of high school language.

#### AREA 6A (UC Only) Languages Other than English

9. If an achievement test (credit by exam) is not available, a faculty member associated with a California Community College (CCC) can verify a student’s competence. The CCC must provide a document on letterhead asserting that the student has mastered proficiency in the language equivalent to two years of high school study.

10. Language other than English “O” level exam with grade of A, B, or C. (Exams in British and former British Colonies.)

11. Language other than English International “A” level exam with a score of 5, 6, or 7. (Exams in British and former British Colonies.)

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### US History, Constitution and American Ideals (AI) Requirement (CSU Only)

For CSU

The CSU US History, Constitution, and American Ideals (AI) graduation requirement is not part of IGETC. Courses used to satisfy this requirement may also be listed in Areas 3B and/or 4F. However, CSU campuses have the discretion whether to allow courses used to satisfy the CSU AI graduation requirement to count in both Area 3B/4F and to meet the AI graduation requirement. In the absence of specific knowledge of a CSU campus policy for double-counting, MJC will certify IGETC using the courses in areas 3B/4F and the CSU AI graduation requirement.

Complete six (6) units prior to transfer. Three (3) units from Group a. and three units from Group b. OR six (6) units from Group c.

#### a. ECON 115 Econ History of the US (3) (F04)

#### HIST 101 Hist of US thru Reconstruction (3) (F04)

#### HIST 102 Hist of US post Civil War (3) (F04)

#### HIST 112 20th Cent. America (3) (F04)

#### HIST 113 Soc/Cult. Hist US Prior 20th Cent. (3) (F04)

#### HIST 115 Econ History of the US (F04) (3)

#### HIST 116 Women in American History (F04) (3)

#### HIST 119 Soc/Cult. Hist 20th Cent Amer(3) (F04)

#### HIST 154 Afr Amer thru 18th Cent(3) (F04)

#### HIST 155 Afr-Amer in 20th & 21st Cents. (3) (F04)

#### b. POLSC 101 American Politics(3) (F04)

#### POLSC 102 The Const. & Rights of Amer.(3)(F04)

#### POLSC 120 Calif Politics & Pros (3) (F04)

### Legend

- (3) Units earned
- (F97) Students completing this course prior to this Term and year will not be allowed to fulfill this requirement with this course.
- * Denotes a lab course.
- ** Indicates that transfer credit may be limited on specific course sequences at the UC.
- ^ Although listed in more than one area, the course may be counted toward only one IGETC pattern area.
California State University System

The campuses vary in size and are located in communities ranging from small towns to large metropolitan areas. They include the following campuses:

- California Maritime Academy
- California State Polytechnic University, Pomona
- California State Polytechnic University, San Luis Obispo
- California State University, Bakersfield
- California State University, Channel Islands
- California State University, Chico
- California State University, Dominguez Hills
- California State University, East Bay
- California State University, Fresno
- California State University, Fullerton
- California State University, Long Beach
- California State University, Los Angeles
- California State University, Monterey Bay
- California State University, Northridge
- California State University, Sacramento
- California State University, San Bernardino
- California State University, San Marcos
- California State University, Stanislaus
- Humboldt State University
- San Diego State University
- San Francisco State University
- San Jose State University
- Sonoma State University

CSU Admission

Students who were eligible to enter a California State University upon graduation from high school are eligible to transfer on a space available basis from a community college at the close of any semester with a cumulative grade point average of 2.0 (C) or better.

Students who were not eligible to enter a California State University upon graduation from high school must satisfy specific course requirements and complete 60 units in courses certified for baccalaureate credit with a grade point average of 2.0 (C) or better.

MJC Students and the CSU System

The California State University system depends on community college transfers for a large portion of its upper-division enrollment. More than 66% of CSU Bachelor’s degrees are awarded to community college transfers. By proper program planning, students may complete lower division preparation at MJC and transfer to the campus of their choice without loss of units. Information on the major transfer fields for which students may prepare at MJC is available in the Counseling or Transfer Center.

Lower Division Transfer Patterns (LDTP)

The Lower Division Transfer Patterns (LDTP) is a program sponsored by the California State University (CSU) and supported by the California Community Colleges that presents potential transfer students with the most direct path to a bachelor’s degree in the CSU system. The ultimate goal of the LDTP is to identify a set of “road maps” for students to follow that will increase their academic preparation and decrease their time to graduate once they enter the CSU. Students may enter into an LDTP agreement up to the time they have completed 45 transferable units. Students who elect to follow the LDTP option will receive the highest priority for admission to a CSU campus.

“Highest priority for admission”—defined as a written guarantee of admission to a particular CSU campus and major—goes into effect when both the student and the CSU campus ratify an LDTP agreement. The guarantee is subject to both the satisfactory completion of the agreement’s requirements and the ability of the particular campus to accommodate the student. Students will be asked to successfully complete a specified set of general education courses and some major courses that will be common to all CSU campuses offering that major. Students will also be asked to successfully complete an additional set of courses identified by the particular CSU campus named in the LDTP agreement. The student’s coursework in the systemwide and campus-specific LDTP pattern must total at least 60 semester units, the number needed to transfer to CSU as an upper-division student.

Through CSUMentor (www.csumentor.edu) and ASSIST (www.assist.org) students and counselor will be able to find road maps online detailing coursework preparation by CSU campus and major. Effective Spring 2010 term, CSU campuses will be able to provide LDTP admission agreements for CCC students via CSUMentor.

MJC LDTP Courses

CSU faculty representatives from appropriate disciplines created course descriptions for various elements of the statewide LDTP. The list below reflects the MJC courses that have been reviewed and approved by the LDTP faculty to receive LDTP course IDs (TCSU [DISCIPLINE] ###)

<table>
<thead>
<tr>
<th>MJC COURSE ID</th>
<th>LDTP COURSE ID</th>
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<tbody>
<tr>
<td>BUSAD 201</td>
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</tr>
<tr>
<td>BUSAD 202</td>
<td>TCSU BUS 120</td>
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<td>TCSU CMSP 110</td>
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<td>TCSU GEOG 110</td>
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<td>MATH 171</td>
<td>TCSU MATH 210</td>
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<td>MATH 171/MATH 172</td>
<td>TCSU MATH SEQ A</td>
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<td>TCSU MATH 220</td>
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<td>TCSU MATH 230</td>
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<td>TCSU MATH 260</td>
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<td>MUST 122</td>
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</tr>
<tr>
<td>SPGCM 103</td>
<td>TCSU SPGCM 130</td>
</tr>
</tbody>
</table>
Planning to Transfer to CSU

Students planning to transfer to one of the California State Universities must keep the following requirements in mind when selecting courses:

1. **General Education Breadth**: Required for graduation from CSU. Select either option to complete lower division requirements at MJC:
   - Complete the CSU-GE Transfer Pattern on p. 76
   - Complete the IGETC Transfer Pattern on p. 78

2. **Prerequisite courses for major**: Some lower division courses in the student’s area of specialization must be taken prior to transfer. The student should consult his/her advisor/counselor to determine divisional course requirements.

3. **Requirements for the minor**: In some programs a minor is also required; the student is advised to check carefully to include lower division courses which may be the prerequisite to upper division work in the minor.

4. **Impacted majors**: High demand majors have very specific criteria such as course work and GPA requirements. Check with a counselor to determine if major or university has impact status.

5. **Transferability of courses**: Only courses certified as appropriate for baccalaureate credit are transferable. 100 to 299 are accepted by all campuses of the California State University.

In planning a lower division program at MJC, bear in mind that a minimum of 120 semester units of college work for a B.A. or B.S. degree is required. By state law the State University may accept for transfer from a community college a maximum of 70 semester units of credit.

### The University of California System

The University of California (UC) has established campuses throughout the state of California. All campuses have uniform entrance requirements and certain other features in common. However, each campus is distinctive and not all majors are offered on all campuses. Students should study the list of undergraduate colleges, schools, and majors available on each campus to determine which campuses will best satisfy their educational needs. Students are encouraged to discuss with their counselors the particular advantages each campus has to offer.

- University of California, Berkeley
- University of California, Davis
- University of California, Irvine
- University of California, Los Angeles
- University of California, Merced
- University of California, Riverside
- University of California, San Diego
- University of California, San Francisco (Health Sciences)
- University of California, Santa Barbara
- University of California, Santa Cruz

### Planning for UC while attending MJC

Students who plan to transfer to the University of California must keep the following requirements in mind when selecting courses:

**General Education Breadth:**

- **Option 1**: Complete the campus-specific General Education breadth requirements. Lists of approved courses which may be used to satisfy breadth requirements are available in the Counseling Center.
- **Option 2**: Complete the IGETC Transfer Pattern (p. 78).

**Transfer credits**: The University grants transfer credit only for courses on its approved list which is available in the Counseling Center. Visit www.assist.org for details.

**Major**: Certain majors require completion of specific courses for admission. Advisors or counselors will assist students in selecting appropriate courses for their given majors.

In planning a lower-division program at MJC, the student should bear in mind that a minimum of 120 semester units of college work for a Bachelor of Arts or Bachelor of Science degree is required. By state law, the University may accept a maximum of 70 semester units of credit for transfer from a community college.

Many prospective transfer students know which UC campus and program they wish to attend and have a general knowledge of University requirements. They also must research the specific requirements of their intended major and campus and the community college courses that are approved to meet those requirements.

Along with www.assist.org and uctransfer.universityofcalifornia.edu, other sources of information helpful to prospective transfer students include UC’s admissions website (www.universityofcalifornia.edu/admissions), its publication Answers for Transfers (available on the website), and the campus General Catalogs, which can be found on the campus websites. Community college UC Transferable Course Agreements and their articulation agreements with UC campuses are also available online at www.assist.org. Campus admissions office also can offer information and assistance.

### IGETC Considerations

Students with a substantial amount of coursework from institutions outside the United States should consult with a community college counselor to determine whether they should complete IGETC or the lower-division breadth/general education requirements at the campus they plan to attend. In addition, some colleges or majors prefer that transfer students follow a more prescribed lower-division curriculum, as described here:

- **BERKELEY**: The College of Letters and Science requires either full completion of the IGETC pattern or the Letters and Science Requirements as selection criteria for admission into the college. The Haas School of Business and the Colleges of Engineering, Environmental Design and Chemistry have extensive, prescribed major prerequisites. In general, IGETC is not appropriate preparation for majors in these colleges. Although IGETC satisfies breadth requirements for most majors in the College of Natural Resources, specific lower division major requirements must still be satisfied; check with the college or visit www.assist.org for more information.

- **DAVIS**: IGETC works well for students planning for Bachelor of Arts majors with few units of lower-division preparation. Bachelor of Science degree and high-unit majors often have many courses of lower-division preparation. In these cases, the UC Davis GE pattern is the best choice.

- **IRVINE**: All schools accept IGETC. However, selection by the campus is
based on demonstrated academic achievement and preparation for the intended major.

LOS ANGELES: The Henry Samueli School of Engineering and Applied Science does not accept IGETC.

MERCED: The School of Engineering and the School of Natural Sciences accept IGETC but do not recommend it.

RIVERSIDE: The Marlan and Rosemary Bourns College of Engineering (BCOE) accepts completion of IGETC as satisfying the majority of the college’s breadth requirement for transfer students. Some additional breadth coursework may be required after enrollment at Bourns. For more information, go to www.engr.ucr.edu/studentaffairs/policies/breadth.shtml. The College of Natural and Agricultural Sciences does not accept IGETC, although any courses taken to satisfy IGETC may be applied toward the college’s breadth pattern. The College of Humanities, Arts, and Social Sciences accepts IGETC.

SAN DIEGO: IGETC is accepted by John Muir, Earl Warren, Sixth and Thurgood Marshall Colleges only. Students completing IGETC are welcomed at Eleanor Roosevelt and Revelle Colleges; however, they must fulfill the specific general education requirements of those colleges. At UCSD, all majors are available to students in each college, so students who choose IGETC will not be restricted in their choice of major as a result.

SANTA BARBARA: Transfers into the College of Letters and Science and the College of Creative Studies may use IGETC to substitute for general education requirements. Transfers into the College of Engineering may also use IGETC to substitute for general education requirements. In addition to general education, all students in the College of Engineering are required to complete a depth requirement. Students who wish to satisfy the depth requirement prior to transfer must complete a yearlong sequence in the history of world civilization, history of Western civilization, history of the United States, history of Western philosophy or history of Western art. Students may want to choose courses for IGETC that will concurrently satisfy the depth requirement. Students may also complete the depth requirement with upper division coursework after transferring. Note that students planning to transfer into a major in engineering, computer science or the biological or physical sciences must be careful to complete lower division major prerequisites to ensure competitiveness for admission and make normal, timely progress through the major.

SANTA CRUZ: Transfer students intending to pursue any major in the physical and biological sciences or the Jack Baskin School of Engineering should not follow IGETC because it will not provide them with enough lower-division preparation for their majors.

Source: University of California 2009-2010: Quick Reference for Counselors

### Transfer to Private Schools and Schools Outside of California

Students who plan to transfer to private colleges or universities outside the UC and CSU systems are advised to consult the catalog of the college to which they plan to transfer for specific lower-division requirements which may be completed at MJC. For assistance in planning a transfer program to private institutions, students should contact a counselor, or visit the MJC Career Development & Transfer Center.
MODESTO JUNIOR COLLEGE AND COLUMBIA COLLEGE EQUIVALENCIES

Interdistrict Course Equivalencies
Between Modesto Junior College and Columbia College

Columbia College and Modesto Junior College, as members of the Yosemite Community College District, have established articulation agreements
allowing students to use specific courses taken at either college to satisfy prerrequisites and program requirements at either institution. Below is a
partial list of equivalent courses. If you are interested in learning whether another course taken at either institution is equivalent to a specific course, you
should contact and MJC counselor at (209) 575-6080.
MJC

COLUMBIA

ANAT 125. . . . . . . . . . . . . . . . . . . . . . . . . . . . . BIOL 10
ANTHR 101. . . . . . . . . . . . . . . . . . . . . . . . . . . ANTHR 1
ANTHR 102. . . . . . . . . . . . . . . . . . . . . . . . . . . ANTHR 2
ANTHR 130. . . . . . . . . . . . . . . . . . . . . . . . . . ANTHR 10
ANTHR 150. . . . . . . . . . . . . . . . . . . . . . . . . . ANTHR 15
AP 50 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BIOL 150
ART 108. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 31
ART 120. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 1
ART 123. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 9A
ART 124. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 2
ART 124. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 4
ART 144. . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 23A
ART 145. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 23B
ART 148. . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 21A
ART 149. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 21B
ART 164. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 11
ART 165. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 12
ART 169. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ART 13
ART 170 or (181 & 182). . . . . . . . . . . . . . . . . . ART 40
BIO 101. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BIOL 2
BIO 111. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BIOL 17
BOT 101. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . BIOL 6
BUSAD 201. . . . . . . . . . . . . . . . . . . . . . . . . . BUSAD 1A
BUSAD 202. . . . . . . . . . . . . . . . . . . . . . . . . . BUSAD 1B
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Success through self expression...

“MJC really opened up a lot of doors for me. I have had amazing professors, and the experience has opened my eyes and helped me to mature.”

Missy Aguilar realized early the importance of higher education in getting a good job and being independent, and didn’t waste a minute getting started on a college path. The summer of 2005, immediately after graduating from Beyer High School, she began attending classes at Modesto Junior College. Although still deciding whether to become a financial advisor, accountant, or other professional, she wanted a career that dealt with managing money, and planned to earn an Associate degree in business administration before transferring to San Francisco State University. However, life has a way of changing the most carefully laid plans. Following the birth of her son in 2006 and her mother’s health issues, Missy had to flex her dreams around her family’s needs. In order to help her mom, Missy temporarily put aside moving to San Francisco and after graduating from MJC, transferred instead to nearby California State University, Stanislaus, where she is a business major.

Being a full time student, part time employee and a single mother is difficult, but Missy meets each challenge with clearly defined priorities and a sense of purpose. “I have a huge responsibility that looks up at me every morning. It is not a choice to be a full time parent.” She also realizes the power of determination and self-motivation in pursuing her educational goals, and offers this advice to other students, “Stay focused and remember what you are coming to school for.”

Missy works for Estée Lauder and is an accomplished make-up artist, providing her services to wedding groups and for individual make-overs. She gains deep satisfaction in helping others to look their best. “A face is like an empty canvas on which I can create a whole new look for someone. I find a strong feature in everyone and then highlight it, helping them to feel good about themselves. Because of me their special day will be more beautiful, and their self esteem strengthened.”

Every summer Missy travels to Guatemala, the country her mother is from and where her grandmother, father and a huge extended family still live. She enjoys the colorful, vibrant culture and the slower pace of life she finds there. “While it teaches you to appreciate running water, paved roads and other things we take for granted, you realize you don’t need them to be happy. Everyone is so happy while living in a shack!” Missy also relishes her favorite Guatemalan dish called “paches,” a spicy tamale-like dish served on special occasions, and is pleased that the trips are helping her son to learn Spanish.

Missy commends the learning environment she experienced while attending MJC. “People respect you for what you offer intellectually at MJC, and the things I read inspired me. You can have a conversation on campus about politics and people really listen. They are interested in talking about deeper things.” Her favorite class was Women’s Literature with Professor Kimberly Manner and she also enjoyed English 102 with Professor Theron Westropce. “I really like to write, and these classes provided the opportunity for me to express myself.”

Missy Aguilar
Educational Programs

Associate's degrees, Certificates of Achievement, and Skills Recognition Awards offered at Modesto Junior College
How to read program information

Agriculture: Sales, Service PROGRAM

The preferred sequence of courses given options between or among courses in the Electives. (Students can be given options between or among courses in the Electives.)

Certificate of Achievement: Agriculture: Sales, Service Technician

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C- or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
   AG 115 (1) Introduction to Agricultural Education and Careers ........................................... 1
   AG 140A-D (NP) Work Experience: For a total of 4 units** OR
   AG 241 (NP) Agricultural Internship* ................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
   PLSC 200 (NP) Introduction to Plant Science ........................................................................ 3
   ANSC 200 (NP) Introduction to Animal Science ............................................................... 3
   PR 200 (NP) Soils ........................................................................................................... 4
   AGA 300 (NP) Introduction to Microbiology ..................................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 18 UNITS
   ASEC 200 (3) Agricultural Accounting & Analysis .............................................................. 3
   ASEC 210 (1,2) Elements of Agricultural Economics ...................................................... 3
   ASEC 215 (1,3,4) Agricultural Marketing ........................................................................ 3
   ASEC 280 (NP) Agricultural Sales and Services .............................................................. 3
   IAE 201 100 (NP) Fund of Public Speaking .................................................................... 1 OR
   IAE 201 103 (NP) Introduction to Human Communication ........................................... 3
   AG 281 (1,2) Agricultural Communication classes .......................................................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ....................................................... 32

**Required

A.S. Degree: Agriculture: Sales, Service

To earn an Associate in Science Degree, the student must complete the NBC Associate Degree Requirements in addition to the following coursework.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
   AG 115 (1) Introduction to Agricultural Education and Careers ........................................... 1
   AG 140A-D (NP) Work Experience: For a total of 4 units** OR
   AG 241 (NP) Agricultural Internship* .............................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
   PLSC 200 (NP) Introduction to Plant Science ........................................................................ 3
   PR 200 (NP) Soils ............................................................................................................. 4
   AGA 300 (NP) Introduction to Microbiology ..................................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS
   ASEC 200 (3-4) Agricultural Accounting & Analysis ............................................................ 3

A.S. Degree: Animal Science

To earn an Associate in Science Degree, the student must complete the NBC Associate Degree Requirements in addition to the following coursework.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
   AG 115 (1) Introduction to Agricultural Education and Careers ........................................... 1
   AG 140A-D (NP) Work Experience: For a total of 4 units** OR
   AG 241 (NP) Agricultural Internship* .............................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
   PLSC 200 (NP) Introduction to Plant Science ........................................................................ 3
   PR 200 (NP) Soils ............................................................................................................. 4
   AGA 300 (NP) Introduction to Microbiology ..................................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS
   ASEC 200 (3-4) Agricultural Accounting & Analysis ............................................................ 3

Animal Science PROGRAM

A.S. Degree: Animal Science

To earn an Associate in Science Degree, the student must complete the NBC Associate Degree Requirements in addition to the following coursework.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
   AG 115 (1) Introduction to Agricultural Education and Careers ........................................... 1
   AG 140A-D (NP) Work Experience: For a total of 4 units** OR
   AG 241 (NP) Agricultural Internship* .............................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
   PLSC 200 (NP) Introduction to Plant Science ........................................................................ 3
   PR 200 (NP) Soils ............................................................................................................. 4
   AGA 300 (NP) Introduction to Microbiology ..................................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS
   ASEC 200 (3-4) Agricultural Accounting & Analysis ............................................................ 3

Any 200 level Animal Science class not listed above

TOTAL UNITS FOR MAJOR REQUIREMENTS ............................................................................ 32

**Required

Elective courses (students can be given options between or among courses in the Electives)
Agricultural and Environmental Sciences at MJC

Agricultural studies play an essential part in filling the world-wide demand for food and fiber. The program of courses offered in agriculture is designed to prepare students for a variety of professions or occupations in agriculture or transfer to higher institutions. Students preparing for immediate entry into agricultural occupations will find practical sequences of courses designed to assist them in achieving their occupational goals. University transfers may take agricultural courses appropriate to the majors and programs of the institutions to which they are transferring.

Supervised practice (work experience) is an essential part of the instruction offered and is a requirement for completion of all agricultural programs. Majors completing the appropriate requirements may earn the Associate in Science degree. Transfer and community college students completing the requirements of technical programs may earn certificates of achievement. Students should consult division advisors for enrollment and program details before registration. In order to complete a program, students must complete courses approved by the division. Divisional advisors will assist students in the selection of proper courses and sequences.

 Degrees and/or Certificates Offered:
- Advanced Heavy Equipment Technician, SR
- Agricultural Business, AS
- Agriculture Laboratory Technician, AS, C
- Agricultural Science, AS
- Agriculture - Sales, Service Technician, AS, C
- Animal Science, AS
- Artificial Insemination Technician, C
- Basic Heavy Equipment Technician, SR
- Commercial Floristry Technician, C
- Crop Science, AS
- Dairy Industry, AS
- Dairy Industry Technician, SR
- Dairy Science, AS
- Environmental Horticultural Science, AS
- Food Processing, AS, C
- Forestry, AS, C
- Fruit Science, AS
- Heavy Machinery Management, SR
- Landscape Design, C
- Landscape/Park Maintenance, C
- Mechanized Agriculture, AS
- Mechanized Agriculture Technician, C
- Nursery Production, C
- Poultry Science, AS
- Recreational Land Management, AS, C
- Soil Science, AS
- Veterinary Technician, C

Advanced Heavy Equipment Technician PROGRAM

In this program, students will develop additional skills and knowledge to enter the diesel mechanics field. Contact the division office in the Agriculture Building for advising assistance.

Skills Recognition: Advanced Heavy Equipment Technician

- To earn a Skills Recognition Award, the student must complete the following coursework. Each Course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES FOR SKILLS RECOGNITION AWARD

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 215 [NP]</td>
<td>Machinery Management</td>
</tr>
<tr>
<td>AGM 221 [NP]</td>
<td>Equipment Diagnosis and Repair</td>
</tr>
<tr>
<td>AGM 240 [NP]</td>
<td>Truck/Tractor Power Frames</td>
</tr>
<tr>
<td>AGM 242 [NP]</td>
<td>Diesel Engine Overhaul</td>
</tr>
<tr>
<td>AGM 245 [NP]</td>
<td>Diesel Engine Fuel Systems</td>
</tr>
<tr>
<td>AUTEC 317 [NP]</td>
<td>Automotive Air Conditioning</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 18
Agricultural Business PROGRAM

This program will develop and expand the student’s knowledge of Agriculture Business. The student will develop knowledge and skills sufficient to gain and hold entry-level jobs in Ag Business. Contact the division office in the Agriculture Building for advising assistance.

A.S. Degree: Agriculture Business

**Required

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>[1]</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP]</td>
<td>Work Experience ** (for a total of 4 units)</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP]</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>[1,2]</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>[1,2]</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>[1,2]</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[NP]</td>
<td>Introduction to Mechanical Technology</td>
</tr>
</tbody>
</table>

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>AGEC 200</td>
<td>[2]</td>
<td>Agriculture Accounting and Analysis</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>[NP]</td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGEC 220</td>
<td>[3,4]</td>
<td>Agricultural Business Management</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>[NP]</td>
<td>Agriculture Computer Applications</td>
</tr>
</tbody>
</table>

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

Any 200 series Agriculture course with a laboratory. No more than 1 unit in a 300 level Agriculture class.

**Units in A.S. Major ........................................................................................................ 30

Certificate of Achievement:

Agriculture Laboratory Technician

- To earn a Certificate of Achievement, the student must complete the coursework as indicated below in addition to completing 400 hours of in-laboratory work experience. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>[1]</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP]</td>
<td>Work Experience ** (for a total of 4 units)</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP]</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>[NP]</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>[NP]</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>[NP]</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[NP]</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>[1,2]</td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGEC 220</td>
<td>[2]</td>
<td>Agricultural Accounting and Analysis</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 14 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 376</td>
<td>[3,4]</td>
<td>Basic Science and Laboratory Techniques</td>
</tr>
<tr>
<td>AG 280</td>
<td>[1,2]</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>FDP 376</td>
<td>[1]</td>
<td>Basic Food Plant Laboratory Procedures</td>
</tr>
<tr>
<td>FDP 378</td>
<td>[2]</td>
<td>Food Laboratory Instruments</td>
</tr>
<tr>
<td>AG 285</td>
<td>[1,2]</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>FDP 200</td>
<td>[1]</td>
<td>Basic Food Processing</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>[3,4]</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>[3,4]</td>
<td>Introductory College Chemistry</td>
</tr>
<tr>
<td>CHEM 144</td>
<td>[3,4]</td>
<td>Fundamentals of Organic and Biochemistry</td>
</tr>
<tr>
<td>MICRO 101</td>
<td>[3,4]</td>
<td>Microbiology</td>
</tr>
<tr>
<td>FDP 379-387</td>
<td>[1]</td>
<td>Select course in consultation with advisor</td>
</tr>
</tbody>
</table>

**Total units for certificate of achievement ..................................................................... 34

**Required
A.S. Degree:

Agriculture Laboratory Technician

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers ............................................. 1
AG 349A-D [NP] Work Experience (total of 4 units)** .................................................................. 4 OR
AG 249 [NP] Agriculture Internship** .......................................................................................... 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200 [NP] Introduction to Plant Science .......................................................................... 3 OR
ANSC 200 [NP] Introduction to Animal Science ........................................................................... 3
NR 200 [NP] Soils .................................................................................................................. 4
AGM 200 [NP] Introduction to Mechanical Technology ............................................................. 3
AGEC 225 [NP] Agriculture Computer Applications ................................................................. OR
AGEC 210 [NP] Elements of Agricultural Economics ................................................................. OR
AGEC 200 [2] Agricultural Accounting and Analysis ................................................................. 3

III. AGRICULTURE MAJOR REQUIRED COURSES - COMPLETE 8 UNITS

AG 376 [3,4] Basic Science and Laboratory Techniques .......................................................... 3
AG 280 [NP] Agricultural Computations ................................................................................. 3 OR
FH 200 [NP] Veterinary Technology ...................................................................................... HIGHER MATH
FDP 376 [1] Basic Food Plant Laboratory Procedures .............................................................. 1
FDP 378 [2] Food Laboratory Instruments .................................................................................. 1

IV. ELECTIVE COURSES - COMPLETE 8 UNITS

CHEM 101 [NP] General Chemistry 1 .................................................................................... 5 OR
CHEM 144 [NP] Introductory College Chemistry ................................................................. 5 OR
CHEM 144 [NP] Fundamentals of Organic and Biochemistry .............................................. 4-5
MICRO 101 [NP] Microbiology .................................................................................................. 4
AG 285 [1,2] Agricultural Communications .............................................................................. 3
FDP 200 [1] Basic Food Processing ........................................................................................... 3
FDP 379-387 [1] Select course in consultation with advisor ...................................................... 1-2

ANY COURSE NOT TAKEN IN II. AND/OR III. ABOVE MAY BE USED TO COMPLETE IV.

UNITs IN A.S. MAJOR .................................................................................................................. 30

**Required

A.S. Degree: Agricultural Science

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers ............................................. 1
AG 349A-D [NP] Work Experience (total of 4 units)** .................................................................. 4 OR
AG 249 [NP] Agriculture Internship** .......................................................................................... 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200 [NP] Introduction to Plant Science .......................................................................... 3
ANSC 200 [NP] Introduction to Animal Science ........................................................................... 3
NR 200 [NP] Soils .................................................................................................................. 4
AGM 200 [NP] Introduction to Mechanical Technology ............................................................. 3
AGEC 225 [NP] Agriculture Computer Applications ................................................................. OR
AGEC 210 [NP] Elements of Agricultural Economics ................................................................. OR
AGEC 200 [2] Agriculture Accounting and Analysis ................................................................. 3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

AGM 210 [NP] Agricultural Welding ......................................................................................... 3
EHS 210 [NP] Beginning Floral Design ....................................................................................... 3
ANSC 201 [NP] Beginning Floral Design ....................................................................................... OR
ANSC 210 [NP] Swine Science ..................................................................................................... 3
ANSC 203 [NP] Sheep Science ................................................................................................... 3
ANSC 230 [2,3,4] Poultry Science ................................................................................................. 3
EHS 210 [NP] Introduction to Environmental Horticulture ....................................................... 3
PLSC 220 [NP] Fruit Science ..................................................................................................... 3

IV. AGRICULTURE MAJOR ELECTIVE COURSES - COMPLETE 7 UNITS

ANY CLASS NOT USED IN AREA II & III
ANY 200 LEVEL AGRICULTURE CLASS APPROVED BY ADVISOR
2 UNITS OF 300 LEVEL CLASS

TOTAL UNITs IN A.S. MAJOR ................................................................................................. 30

**Required

A.A. Degree: University Preparation,
Emphasis in Agricultural Sciences (p. 174)
### Agriculture: Sales, Service Technician

**Certificate of Achievement:**

**Agriculture: Sales, Service Technician**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

#### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag 115</td>
<td>1</td>
</tr>
<tr>
<td>Ag 349A-D</td>
<td>4 OR</td>
</tr>
<tr>
<td>Ag 249</td>
<td>4</td>
</tr>
</tbody>
</table>

#### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>3</td>
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</table>

#### III. MAJOR REQUIRED COURSES - COMPLETE 18 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE 200</td>
<td>3</td>
</tr>
<tr>
<td>AGE 210</td>
<td>3</td>
</tr>
<tr>
<td>AGE 215</td>
<td>3</td>
</tr>
<tr>
<td>AGE 280</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>1 OR</td>
</tr>
<tr>
<td>SPCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>AG 285</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** 32

**Required**

### A.S. Degree: Agriculture: Sales, Service

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag 115</td>
<td>1</td>
</tr>
<tr>
<td>Ag 349A-D</td>
<td>4 OR</td>
</tr>
<tr>
<td>Ag 249</td>
<td>4</td>
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</tbody>
</table>

**Required**

#### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>3</td>
</tr>
</tbody>
</table>

#### III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE 200</td>
<td>3</td>
</tr>
<tr>
<td>AGE 210</td>
<td>3</td>
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<tr>
<td>AGE 215</td>
<td>3</td>
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<tr>
<td>AGE 280</td>
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</tr>
<tr>
<td>AGE 225</td>
<td>3</td>
</tr>
<tr>
<td>AGE 210</td>
<td>3</td>
</tr>
<tr>
<td>AGE 200</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required**

### Animal Science

#### A.S. Degree: Animal Science

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag 115</td>
<td>1</td>
</tr>
<tr>
<td>Ag 349A-D</td>
<td>4 OR</td>
</tr>
<tr>
<td>Ag 249</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required**

#### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>3</td>
</tr>
</tbody>
</table>

#### III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 200</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 201</td>
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<td>ANSC 202</td>
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<td>ANSC 211</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 214</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 215</td>
<td>3</td>
</tr>
</tbody>
</table>

**Required**

#### IV. ELECTIVE COURSES - COMPLETE 4 UNITS

- Any 200 level Animal Science class not listed above
- Any Agriculture class not used in Area II. for breadth core
- Any Animal Science class not used in Area III. for major core
- No more than two units of 300 level Agriculture classes

**UNITS IN A.S. MAJOR** 30

**Required**
Artificial Insemination Program

The student will develop skills and knowledge sufficient enough to collect bull semen, artificially inseminate cows, and to evaluate pedigrees. The student will also develop skills in basic salesmanship. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement:
Artificial Insemination Technician

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
   AG 115 [1] Introduction to Agricultural Education and Careers ............................. 1
   AG 349A-D [NP] Work Experience (for a total of 4 units)** ..................................... 4 OR
   AG 249 [NP] Agriculture Internship** ................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
   AG 376 [NP] Basic Science & Lab Techniques ....................................................... 3
   AGEC 200 [2,3,4] Agricultural Accounting & Analysis ........................................... 3
   AGEC 280 [NP] Agricultural Sales & Services ....................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 13 UNITS
   ANSC 201 [NP] Beef Cattle Science ...................................................................... 3
   ANSC 217 [NP] Advanced Breeding & Artificial Insemination .............................. 3 OR
   ANSC 226 [NP] Dairy Breeding & Selection ......................................................... 3
   ANSC 216 [NP] Livestock Breeding & Selection .................................................... 3

IV. ELECTIVE COURSES - COMPLETE 3 UNITS
   ANSC 224 [NP] Dairy Feeds & Feeding ............................................................... 3 OR
   ANSC 214 [NP] Livestock Feeding & Nutrition ..................................................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 30

Basic Heavy Equipment Technician Program

In this program, students will develop additional skills and knowledge to enter the diesel mechanics field. Contact the division office in the Agriculture Building for advising assistance.

Skills Recognition award:
Basic Heavy Equipment Technician

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES
   AGM 210 [NP] Agriculture Welding ..................................................................... 3
   AGM 214 [NP] Equipment Service and Safety .................................................... 1
   AGM 241 [NP] Diesel Engine Principles .............................................................. 3
   AGM 243 [NP] Heavy Machinery Electrical Systems ......................................... 3
   AGM 280 [NP] Mobile Hydraulics ...................................................................... 3
   AGM 289 [NP] Principles of Power Mechanics and Small Engines ................. 3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ............................................. 16
### Commercial Floristry Program

The Commercial Floristry Program prepares students to enter the field of Floral Design and Flower Shop Management. The program is designed to provide entry level skills, and further, to prepare students for advancement within this ever-changing and dynamic industry.

**Certificate of Achievement:**

**Commercial Floristry Technician**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

<table>
<thead>
<tr>
<th>I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AG</strong> 115 [1] Introduction to Agricultural Education and Careers ........................................ 1</td>
</tr>
<tr>
<td><strong>AG</strong> 349A-D [1] Work Experience (total of 4 units)** ........................................... 4</td>
</tr>
<tr>
<td><strong>AG</strong> 249 Agriculture Internship** ........................................................................ 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLSC</strong> 200 [1] Introduction to Plant Science .............................................................. 3</td>
</tr>
<tr>
<td><strong>NR</strong> 200 [NP] Soils ................................................................................................ 4</td>
</tr>
<tr>
<td><strong>AGM</strong> 200 [NP] Introduction to Mechanical Technology .................................................. 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 225 [NP] Agriculture Computer Applications ...................................................... 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 210 [1] Elements of Agriculture Economics .......................................................... 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 200 [2] Agriculture Accounting and Analysis ....................................................... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. AGRICULTURE MAJOR COURSES - COMPLETE 27 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EHS</strong> 201 [1,2] Plant Identification and Usage 1 ................................................................. 3</td>
</tr>
<tr>
<td><strong>EHS</strong> 210 [1] Introduction to Environmental Horticulture .................................................. 3</td>
</tr>
<tr>
<td><strong>EHS</strong> 212 [2,3,4] Floriculture Crop Production ................................................................. 3</td>
</tr>
<tr>
<td><strong>EHS</strong> 280 [1] Beginning Floral Design .................................................................................. 3</td>
</tr>
<tr>
<td><strong>EHS</strong> 281 [2,3,4] Advanced Floral Design .......................................................................... 3</td>
</tr>
<tr>
<td><strong>EHS</strong> 282 [3,4] Floral Shop Management ............................................................................ 4</td>
</tr>
<tr>
<td><strong>EHS</strong> 383 [1,2] Commercial Floristry Production ............................................................... 4</td>
</tr>
<tr>
<td><strong>AGEC</strong> 280 [4] Agricultural Sales &amp; Service .................................................................... 3</td>
</tr>
<tr>
<td><strong>SPCOM</strong> 102 [1] Introduction to Human Communication .................................................... 3</td>
</tr>
<tr>
<td><strong>BUSAD</strong> 259 [NP] Small Business Management ................................................................. 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 255 [NP] Plant Pest Control .................................................................................... 3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ............................................. 41

**Required**

### Crop Science Program

The student acquires skills in production of the common row and field crops grown in the Central Valley. Specific skills are emphasized in seedbed preparation, planting, fertilizing, weed control, pest management, harvesting, and marketing. Training leads to farming as well as employment in allied businesses such as fertilizer or agricultural chemical companies, seed companies, processing companies, and other related industries. Contact the division office in the Agriculture Building for advising assistance.

**A.S. Degree: Crop Science**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

<table>
<thead>
<tr>
<th>I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AG</strong> 115 [1] Introduction to Agricultural Education and Careers ........................................ 1</td>
</tr>
<tr>
<td><strong>AG</strong> 349A-D [NP] Work Experience (total of 4 units)** ........................................... 4</td>
</tr>
<tr>
<td><strong>AG</strong> 249 [NP] Agriculture Internship** ........................................................................ 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMSC</strong> 200 [2,3,4] Introduction to Animal Science .......................................................... 3</td>
</tr>
<tr>
<td><strong>NR</strong> 200 [2] Soils ................................................................................................ 4</td>
</tr>
<tr>
<td><strong>AGM</strong> 200 [2,3,4] Introduction to Mechanical Technology .................................................. 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 225 [2,3,4] Agriculture Computer Applications ...................................................... 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 210 [2,3,4] Elements of Agriculture Economics ....................................................... 3</td>
</tr>
<tr>
<td><strong>AGEC</strong> 200 [2,3,4] Agriculture Accounting and Analysis ....................................................... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLSC</strong> 200 [1] Introduction to Plant Science ................................................................. 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 205 [2] Field Crops ......................................................................................... 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 215 [1] Vegetable Crops .................................................................................... 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 250 [4] Plant Nutrition &amp; Fertilizers ................................................................. 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 255 [2] Plant Pest Control .................................................................................... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AG</strong> 280 [1] Agricultural Computations ................................................................. 3</td>
</tr>
<tr>
<td><strong>AGM</strong> 220 [2,3,4] Farm Machinery ........................................................................ 3</td>
</tr>
<tr>
<td><strong>AGM</strong> 235 [2,3,4] Irrigation and Drainage ................................................................. 3</td>
</tr>
<tr>
<td><strong>PLSC</strong> 260 [2,3,4] Plant Disease Control .................................................................... 3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN A.S. MAJOR** ................................................................................... 71

**Required**
Certificate of Achievement:
Dairy Industry Technician

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

### I. AGRICULTURE CAREER COURSES - COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 349 B</td>
<td>Dairy Processing/Work Experience</td>
<td>2</td>
</tr>
</tbody>
</table>

### II. AGRICULTURE BREADTH COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 200</td>
<td>Introduction to Animal Science</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 215</td>
<td>Animal Health and Sanitation</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>Soils</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>Elements of Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>Agriculture Accounting &amp; Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

### III. AGRICULTURE MAJOR ELECTIVE UNITS - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD**: 17

### A.S. Degree: Dairy Industry

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>Work Experience</td>
<td>1</td>
</tr>
<tr>
<td>AG 349 A-D</td>
<td>Work Experience (total of 4 units)**</td>
<td>4 OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>Agriculture Internship</td>
<td>4</td>
</tr>
</tbody>
</table>

### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 200</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>Soils</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>Elements of Agriculture Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>Agriculture Accounting &amp; Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

### III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAIND 301</td>
<td>Good Manufacturing Practices and Sanitation</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 302</td>
<td>Fluid Stream</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 303</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
</tbody>
</table>

### IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 4 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 222</td>
<td>Milk Production &amp; Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 227</td>
<td>Advanced Breeding &amp; Artificial Insemination</td>
<td>4</td>
</tr>
<tr>
<td>ANSC 222</td>
<td>Milk Production &amp; Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 227</td>
<td>Advanced Dairy Cattle Selection &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 228</td>
<td>Dairy Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**UNITS IN A.S. MAJOR**: 30 **Required**
A.S. Degree:

Environmental Horticultural Science

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER CORE – COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers ........................................ 1
AG 349A-D ** ([NP]) Work Experience (total of 4 units)** ........................................... 4 OR
AG 249 ** ([NP]) Agriculture Internship** .................................................................. 4

II. AGRICULTURE SCIENCE BREADTH CORE – COMPLETE 6 UNITS

ANSC 200 [1] Introduction to Animal Science ................................................................ 3
NR 200 [2] Soils ...................................................................................................... 4
AGM 200 [1] Introduction to Mechanical Technology .................................................... 3
AGEC 225 [1,2] Agriculture Computer Applications .................................................. 3 OR
AGEC 210 [1] Elements of Agricultural Economics ................................................... 3 OR
AGEC 200 [2,3] Agricultural Accounting and Analysis .................................................. 3

III. AGRICULTURE MAJOR COURSES – COMPLETE 12 UNITS

PLSC 200 [1,2] Introduction to Plant Science ............................................................. 3
EHS 201 [1,2] Plant Identification and Usage 1 ............................................................ 3
EHS 202 [1,2] Plant Identification and Usage 2 ............................................................ 3
EHS 210 [1] Introduction to Environmental Horticulture ........................................... 3

IV. AGRICULTURE MAJOR ELECTIVES – COMPLETE 7 UNITS

AGM (ANY) Any class listed in Mechanized Agriculture ........................................... 1-4
EHS 212 [3,4] Floriculture Crop Production ................................................................. 3
EHS 215 [3] Landscape Design .................................................................................. 3
EHS 220 [3,4] Turfgrass Management ....................................................................... 3
EHS 235 [NP] Plant Propagation/Production ............................................................... 3
EHS 250 [NP] Landscape Irrigation .......................................................................... 3
EHS 276 [1,2] Landscape Maintenance ...................................................................... 3
EHS 278 [3,4] Landscape Construction and Installation .............................................. 3
EHS 280 [1] Beginning Floral Design ..................................................................... 3
NR 222 [3] Native Tree & Shrub Identification ............................................................ 3
PLSC 250 [2,3] Plant Nutrition & Fertilizer ................................................................. 3
PLSC 255 [2,3] Plant Pest Control ............................................................................ 3
PLSC 260 [2,3] Plant Disease Control ...................................................................... 3

UNITS IN A.S. MAJOR ................................................................................................. 30

**Required

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES – COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers .................................. 1
AG 349A-D ** ([NP]) Work Experience** ................................................................. 4 OR
AG 249 ** ([NP]) Agriculture Internship** ................................................................. 4

II. AGRICULTURE SCIENCE COURSES – COMPLETE 9 UNITS

PLSC 200 [1,2] Introduction to Plant Science ............................................................. 3 OR
ANSC 200 [1,2] Introduction to Animal Science .......................................................... 3
NR 200 [1,2] Soils ..................................................................................................... 4
AGM 200 [1,2] Introduction to Mechanical Technology ............................................. 3
AGEC 225 [1,2] Agriculture Computer Applications .................................................. 3 OR
AGEC 210 [1,2] Elements of Agriculture Economics .................................................. 3 OR
AGEC 200 [1,2] Agriculture Accounting and Analysis .............................................. 3

III. AGRICULTURE MAJOR COURSES – COMPLETE 15 UNITS AS SPECIFIED.

FDP 200 [1] Basic Food Processing ......................................................................... 3
AG 376 [2] Basic Science and Laboratory Techniques ............................................. 3
AG 280 [NP] Agricultural Computations** ............................................................... 3

AND Complete a minimum of 6 units from the list below

FDP 300 [NP] Certified Professional Food Manager Training ................................... 1½
FDP 301 [NP] Certified HACCP Manager Training .................................................... 1½
FDP 342 [NP] Introduction to Wine Evaluation .......................................................... 1
FDP 376 [NP] Basic Food Plant Laboratory Procedures ............................................ 1
FDP 378 [NP] Food Laboratory Instruments ............................................................. 1
FDP 379 [NP] Food Products Grading .................................................................... 1
FDP 380 [NP] Food Products Microanalysis-A .......................................................... 1
FDP 381 [NP] Food Products Microanalysis-B .......................................................... 1
FDP 382 [NP] Food Products Microanalysis-C .......................................................... 1
FDP 383 [NP] Enzymes in the Food Industry ............................................................. 1
FDP 386 [NP] Food Laboratory Chemistry Procedures ............................................ 1
FDP 387 [NP] Food Processing Sanitation & Cleanup .............................................. 1

IV. AGRICULTURE MAJOR ELECTIVES – COMPLETE 6 UNITS

AG 285 [NP] Agricultural Communications ......................................................... 3
MICRO 101 [NP] Microbiology ............................................................................. 4
ANSC 316 [NP] Farm Processing of Meat Animals ..................................................... 2

Any courses not taken in II. and III. may be used to complete IV.

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 35

*Recommended
**Required
***or higher math strongly recommended
**A.S. Degree: Food Processing**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349-A-D [NP]</td>
<td>4 OR</td>
<td>Work Experience (total of 4 units)</td>
</tr>
<tr>
<td>AG 249* [NP]</td>
<td>4</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

* Work experience internship must be associated with food processing industry.

### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200 [1,2]</td>
<td>1½</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>ANSC 200 [1,2]</td>
<td>1½</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>NR 200 [1,2]</td>
<td>1</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200** [1,2]</td>
<td>1</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 210 [1,2]</td>
<td>1 OR 3</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGEC 200 [1,2]</td>
<td>1</td>
<td>Agriculture Accounting and Analysis</td>
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</table>

**Required**

### III. AGRICULTURE MAJOR COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDP 200</td>
<td>1</td>
<td>Basic Food Processing</td>
</tr>
<tr>
<td>AG 376 [2,3]</td>
<td>3</td>
<td>Basic Science and Laboratory Techniques</td>
</tr>
</tbody>
</table>

**Recommended**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDP 300 [NP]</td>
<td>1½</td>
<td>Certified Professional Food Manager Training</td>
</tr>
<tr>
<td>FDP 301 [NP]</td>
<td>1½</td>
<td>Certified HACCP Manager Training</td>
</tr>
<tr>
<td>FDP 376 [NP]</td>
<td>1</td>
<td>Basic Food Plant Procedures</td>
</tr>
<tr>
<td>FDP 378 [NP]</td>
<td>1</td>
<td>Food Laboratory Instruments</td>
</tr>
<tr>
<td>FDP 379 [NP]</td>
<td>1</td>
<td>Food Products Grading</td>
</tr>
<tr>
<td>FDP 380 [NP]</td>
<td>1</td>
<td>Food Product Microanalysis-B Mold Counting</td>
</tr>
<tr>
<td>FDP 382 [NP]</td>
<td>1</td>
<td>Food Product Microanalysis - C</td>
</tr>
<tr>
<td>FDP 383 [NP]</td>
<td>1</td>
<td>Enzymes in the Food Industry</td>
</tr>
<tr>
<td>FDP 386 [NP]</td>
<td>1</td>
<td>Food Laboratory Chemistry Procedures</td>
</tr>
<tr>
<td>FDP 387 [NP]</td>
<td>1</td>
<td>Food Processing Sanitation &amp; Cleanup</td>
</tr>
</tbody>
</table>

### IV. AGRICULTURE MAJOR COURSES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280*** [1,2]</td>
<td>3</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>AG 285 [1,2]</td>
<td>3</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>MICRO 316 [NP]</td>
<td>4</td>
<td>Microbiology</td>
</tr>
<tr>
<td>ANSC 316 [NP]</td>
<td>2</td>
<td>Farm Processing of Meat Animals</td>
</tr>
</tbody>
</table>

Any courses not taken in II. and III. may be used to complete IV.

**TOTAL UNITS IN A.S. MAJOR** .......................................................... 30

---

**Forestry PROGRAM**

This program will develop entry-level job skills and knowledge in natural resources. The student will develop skills in timber cruising, log scaling, fire fighting, forest inventory, and use of aerial photos sufficient to obtain entry-level employment or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

### Certificate of Achievement: Forestry

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

### I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349-A-D [NP]</td>
<td>4 OR</td>
<td>Work Experience (maximum completions total 4 units)</td>
</tr>
<tr>
<td>AG 249* [NP]</td>
<td>4</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

**Required**

### II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200 [1]</td>
<td>1½</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>ANSC 200 [1,2]</td>
<td>1½</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>NR 200 [1,2]</td>
<td>1</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200 [NP]</td>
<td>1</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 225 [NP]</td>
<td>1</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGEC 210 [NP]</td>
<td>1</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGEC 200 [NP]</td>
<td>1</td>
<td>Agriculture Accounting and Analysis</td>
</tr>
</tbody>
</table>

**Recommended**

### III. AGRICULTURE MAJOR COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 220 [1]</td>
<td>3</td>
<td>Introductory Forestry</td>
</tr>
<tr>
<td>NR 222 [2,3]</td>
<td>3</td>
<td>Native Tree &amp; Shrub Identification</td>
</tr>
<tr>
<td>NR 224 [3]</td>
<td>3</td>
<td>Intro to Forestry Measurement</td>
</tr>
<tr>
<td>NR 376 [2]</td>
<td>3</td>
<td>Forestry Technology</td>
</tr>
<tr>
<td>NR 379 [3]</td>
<td>3</td>
<td>Wildland Fire Control</td>
</tr>
<tr>
<td>ENSCI 109 [4]</td>
<td>3</td>
<td>Introduction to Geographic Information Systems</td>
</tr>
</tbody>
</table>

### IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

Any Natural Resources, Agriculture Economics

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280 [NP]</td>
<td>3</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>AGM 230 [NP]</td>
<td>3</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>AG 285 [NP]</td>
<td>3</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>AGM 215 [NP]</td>
<td>3</td>
<td>Machinery Management</td>
</tr>
<tr>
<td>EHS 276 [NP]</td>
<td>3</td>
<td>Landscape Maintenance</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 35

**Required**
A.S. Degree: **Forestry**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**I. FORESTRY CAREER COURSES - COMPLETE 5 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349 A-D</td>
<td>NP</td>
<td>Work Experience (total of 4 units)**</td>
</tr>
<tr>
<td>AG 249</td>
<td>4 OR</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

**II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>3</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>3 OR</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>3 OR</td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3 OR</td>
<td>Agricultural Accounting and Analysis</td>
</tr>
</tbody>
</table>

**III. FORESTRY MAJOR COURSES - COMPLETE 12 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 220</td>
<td>1</td>
<td>Introduction to Forestry</td>
</tr>
<tr>
<td>NR 222</td>
<td>1</td>
<td>Native Tree &amp; Shrub Identification</td>
</tr>
<tr>
<td>ENSCI 108</td>
<td>3</td>
<td>Environmental Conservation</td>
</tr>
<tr>
<td>ENSCI 109</td>
<td>3</td>
<td>Introduction to Geopraphic Information Systems</td>
</tr>
<tr>
<td>NR 376</td>
<td>3</td>
<td>Forestry Technology</td>
</tr>
</tbody>
</table>

**IV. FORESTRY MAJOR ELECTIVES - COMPLETE 4 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any Natural Resources, Agriculture Economics or Plant Science course not listed or used above</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AG 280</td>
<td>3</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>AGM 230</td>
<td>2</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>AG 285</td>
<td>3</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>AGM 215</td>
<td>3</td>
<td>Machinery Management</td>
</tr>
</tbody>
</table>

**UNITS IN A.S. MAJOR** ................................................................. 30

**Required**

---

**Fruit Science PROGRAM**

The student will develop skills and knowledge in managing a horticultural fruit production operation. Training in this course includes practical horticultural skills such as propagation, pruning, thinning, planting, and management skills, such as supervision of labor, selecting insurance, credit, orchard planning, spray programs, and calendar of operation. The program also prepares students for transfer to a four-year college. Contact the division office in the Agriculture Building for advising assistance.

A.S. Degree: **Fruit Science**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349 A-D</td>
<td>NP</td>
<td>Work Experience (total of 4 units)**</td>
</tr>
<tr>
<td>AG 249</td>
<td>4</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

**II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 200</td>
<td>3</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>3</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>3</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>3</td>
<td>Agriculture Accounting and Analysis</td>
</tr>
</tbody>
</table>

**III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS**

**Complete 3 units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>PLSC 230</td>
<td>3</td>
<td>Fruit Science</td>
</tr>
</tbody>
</table>

**Complete 6 units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 241</td>
<td>3</td>
<td>Viticulture</td>
</tr>
<tr>
<td>PLSC 255</td>
<td>3</td>
<td>Plant Pest Control</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>3</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>3</td>
<td>Plant Disease Control</td>
</tr>
</tbody>
</table>

**IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 235</td>
<td>3</td>
<td>Plant Propagation/Production Planting &amp; Varieties</td>
</tr>
<tr>
<td>AGEC 220</td>
<td>3</td>
<td>Agricultural Business Management</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>3</td>
<td>Plant Nutrition and Fertilizers</td>
</tr>
<tr>
<td>AGM 235</td>
<td>3</td>
<td>Irrigation and Drainage</td>
</tr>
</tbody>
</table>

Any class not already taken in Area III

**UNITS IN A.S. MAJOR** ................................................................. 30

**Required**
Heavy Machinery Management PROGRAM

In this program, students will develop skills and knowledge for the successful management of heavy equipment. Contact the division office in the Agriculture Building for advising assistance.

Skills Recognition:

Heavy Machinery Management

To earn a Skills Recognition award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGM 214</td>
<td>Equipment Service and Safety</td>
<td>1</td>
</tr>
<tr>
<td>AGM 215</td>
<td>Machinery Management</td>
<td>2</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>Agriculture Accounting and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 220</td>
<td>Agriculture Business Management</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ............................................. 15

Landscape & Park Maintenance PROGRAM

In this program, the student will develop skills in identifying, using, propagation, planting and maintenance of ornamental plants and materials used in landscaping. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement:

Landscape and Park Maintenance

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER REQUIRED UNITS - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>Introduction to Agricultural Education and Careers</td>
<td>1</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>Work Experience (total of 4 units)**</td>
<td>4 OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>Agriculture Internship**</td>
<td>4</td>
</tr>
</tbody>
</table>

II. AGRICULTURE BREADTH CORE UNITS - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>Soils</td>
<td>4</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>Agricultural Accounting and Analysis</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 21 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHS 201</td>
<td>Plant Identification and Usage 1</td>
<td>3</td>
</tr>
<tr>
<td>EHS 202</td>
<td>Plant Identification and Usage 2</td>
<td>3</td>
</tr>
<tr>
<td>EHS 210</td>
<td>Introduction to Environmental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>EHS 220</td>
<td>Turfgrass Management</td>
<td>2</td>
</tr>
<tr>
<td>EHS 276</td>
<td>Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>EHS 278</td>
<td>Landscape Construction and Installation</td>
<td>3</td>
</tr>
<tr>
<td>EHS 215</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>AGM 222</td>
<td>Compact Power Equipment Repair</td>
<td>1</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280</td>
<td>Agricultural Computations</td>
<td>3</td>
</tr>
<tr>
<td>AG 285</td>
<td>Agricultural Communications</td>
<td>3</td>
</tr>
<tr>
<td>NR 222</td>
<td>Native Tree &amp; Shrub Identification</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 280</td>
<td>Agricultural Sales and Service</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>NR 230</td>
<td>Outdoor/Forest Recreation</td>
<td>3</td>
</tr>
<tr>
<td>EHS 215</td>
<td>Machinery Management</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>Landscape Irrigation</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 255</td>
<td>Plant Nutrition and Fertilizer</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................42

**Required
The Landscape Design technician program prepares students to enter the field of landscape design at the entry level. The program is for students interested in learning the more pragmatic and applications aspect of landscaping and is directed to the application of established scientific and engineering knowledge and methods.

Certificate of Achievement: Landscape Design

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 30 UNITS

- NR 200 [2] Soils ................................................. 4
- EHS 201 [1,2] Plant Identification and Usage 1 ................................................................. 3
- EHS 202 [1,2] Plant Identification and Usage 2 ................................................................. 3
- EHS 210 [1] Introduction to Environmental Horticulture .................................................. 3
- ARCH 121 [1] Beginning Graphics & Design 1 ............................................................... 4
- AG 349A-D [NP] Agriculture Work Experience ............................................................. 4

ELECTIVE COURSES - COMPLETE 16 UNITS

- ARCH 100 [1] Introduction to Engineering & Architecture ........................................ 1 OR
- AG 115 [1] Introduction to Agricultural Education and Careers ................................ 1
- ARCH 131 [3] Architectural Drafting 1 ......................................................................... 4 OR
- ARCH 331 [3] Basic Architectural Drafting 1 ................................................................. 2

Complete 15 units from list below:

- EHS 276 [NP] Landscape Maintenance ................................................................. 3
- EHS 278 [NP] Landscape Construction and Installation ........................................... 3
- ARCH 106 [NP] Materials of Construction .................................................................... 3
- ARCH 107 [NP] Materials of Construction Lab ......................................................... 1
- NR 222 [NP] Native Tree & Shrub Identification ......................................................... 3
- ARCH 152 [NP] Architectural Design 1 ................................................................. 4
- AGM 230 [NP] Field Surveying ................................................................................. 2
- ENGST 210 [NP] Introduction to CAD ................................................................. 1
- BOT 110 [NP] Plant Biology ..................................................................................... 3
- CMPSC 201 [NP] General Computer Literacy ......................................................... 3 OR
- AGE 225 [NP] Agriculture Computer Applications ..................................................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................. 46-47

In this program, students will develop skills and knowledge to enter the mechanized agriculture field. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement: Mechanized Agriculture Technician

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS

- AG 211 [NP] Agricultural Computations .................................................................. 3
- AG 280 [NP] Agricultural Communications .......................................................... 3
- AGEC 280 [NP] Agricultural Sales & Service ......................................................... 3
- AG 285 [NP] Agricultural Communications .......................................................... 3
- AGM 211 [NP] Advanced Agriculture Welding ....................................................... 3
- AGM 214 [NP] Equipment Service and Safety ......................................................... 1
- AGM 225 [NP] Principles of Electrical Wiring ........................................................ 3
- AGM 230 [NP] Field Surveying ................................................................................. 2
- AGM 241 [NP] Diesels Engine Principles ................................................................. 3
- AGM 289 [NP] Principles of Power Mechanics/Small Engines .................................. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 30

**Required
A.S. Degree: **Mechanized Agriculture**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

### I. AGRICULTURE CAREER CORE – COMPLETE 5 UNITS

- **AG 115** [1] Introduction to Agricultural Education and Careers ........................................... 1
- **AG 249** [NP] Agriculture Internship** ............................................................................... 4 OR
- **AG 349A-D** [NP] Work Experience (for a total of 4 units)** ............................................. 4

### II. AGRICULTURE SCIENCE BREATH CORE – COMPLETE 9 UNITS

- **PLSC 200** [NP] Introduction to Plant Science ................................................................ 3
- **ANSC 200** [NP] Introduction to Animal Science ......................................................... 3
- **NR 200** [NP] Soils ........................................................................................................... 4
- **AGEC 225** [NP] Agriculture Computer Applications .................................................... 3 OR
- **AGEC 210** [NP] Elements of Agricultural Economics ................................................ 3 OR
- **AGEC 200** [NP] Agricultural Accounting and Analysis ................................................ 3

### III. AGRICULTURE MAJOR COURSES – COMPLETE 12 UNITS IN ONE OPTION

#### FABRICATION OPTION

- **AGM 200** [1] Introduction to Mechanical Technology .................................................. 3
- **AGM 210** [1,2] Agricultural Welding ............................................................................. 3
- **AGM 262** [NP] Hydraulics/Pneumatics ........................................................................ 3 OR
- **AGM 280** [NP] Mobile Machinery Hydraulic System .................................................. 3
- **AGM 251** [2] Farm Construction & Materials ............................................................. 4

#### POWER OPTION

- **AGM 200** [1] Introduction to Mechanical Technology .................................................. 3
- **AGM 210** [1,2] Agricultural Welding ............................................................................. 3
- **AGM 215** [1] Machinery Management ........................................................................ 3
- **AGM 240** [NP] Truck and Tractor Power Trains ........................................................... 3
- **AGM 262** [NP] Hydraulics/Pneumatics ........................................................................ 3 OR
- **AGM 280** [NP] Mobile Machinery Hydraulic Systems ................................................ 3

### IV. AGRICULTURE ELECTIVE COURSES – COMPLETE 4-5 UNITS

- **AGM 211** [NP] Advanced Agricultural/Welding ............................................................ 3
- **AGM 214** [NP] Equipment Service and Safety ............................................................... 2
- **AGM 225** [NP] Principles of Electrical/Wiring ............................................................... 3
- **AGM 230** [NP] Field Surveying .................................................................................... 2
- **AGM 241** [NP] Diesel Engine Principles ....................................................................... 3
- **AGM 252** [4] Farm Construction Advanced Lab ........................................................... 2
- **AGM 289** [NP] Principles of Power Mechanics/Small Engines .................................... 3

ANY 200 LEVEL AGRICULTURE COURSE INCLUDING THOSE THAT ARE LISTED, BUT NOT USED, IN AREA II ABOVE.

**UNITS IN A.S. MAJOR .............................................................................................................. 30** Required

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### Certificate of Achievement: Nursery Production

**Nursery Production PROGRAM**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

#### I. AGRICULTURE CAREER CORE – COMPLETE 5 UNITS

- **AG 115** [1] Introduction to Agricultural Education and Careers ........................................... 1
- **AG 349A-D** [NP] Work Experience (total of 4 units)** .................................................... 4 OR
- **AG 249** [NP] Agriculture Internship** ............................................................................... 4

#### II. AGRICULTURE SCIENCE BREATH CORE – COMPLETE 9 UNITS

- **PLSC 200** [NP] Introduction to Plant Science ................................................................. 3
- **ANSC 200** [NP] Introduction to Animal Science ............................................................... 3
- **NR 200** [2] Soils .............................................................................................................. 4
- **AGM 200** [NP] Introduction to Mechanical Technology .................................................. 3
- **AGEC 225** [NP] Agriculture Computer Applications ....................................................... 3 OR
- **AGEC 210** [1] Elements of Agriculture Economics ......................................................... 3 OR
- **AGEC 200** [2,3,4] Agriculture Accounting and Analysis .................................................... 3

#### III. AGRICULTURE MAJOR COURSES – COMPLETE 21 UNITS

- **AG 280** [NP] Agricultural Computations ........................................................................ 3
- **AG 285** [NP] Agricultural Communications ................................................................. 3
- **AGM 222** [2,3,4] Compact Power Equipment Repair .................................................... 1
- **EHS 210** [1] Introduction to Environmental Horticulture ............................................. 3
- **EHS 201** [1,2] Plant Identification and Usage 1 .............................................................. 3
- **EHS 202** [1,2] Plant Identification and Usage 2 .............................................................. 3
- **EHS 215** [3,4] Landscape Design .................................................................................... 3
- **EHS 220** [3,4] Turfgrass Management .......................................................................... 2
- **EHS 235** [3,4] Plant Propagation/Production ................................................................. 3
- **NR 222** [3,4] Native Tree and Shrub Identification ....................................................... 3

#### IV. AGRICULTURE MAJOR ELECTIVES – COMPLETE 6 UNITS

- Any course in Plant Science, Agriculture Economics, or Agricultural Economics ............. 3
- **EHS 212** [2,3,4] Floriculture Crop Production ................................................................. 3 OR
- **EHS 276** [1,2] Landscape Maintenance ........................................................................ 3 OR
- **EHS 278** [2,3] Landscape Construction and Installation ................................................ 3
- **PLSC 250** [3,4] Plant Nutrition and Fertilizer ................................................................. 3
- **PLSC 255** [3,4] Plant Pest Control .................................................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................................................. 41**

**Required**
Poultry Science

PROGRAM

In this program the student will develop skills and knowledge sufficient to enter the poultry industry or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

A.S. Degree: Poultry Science

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>3</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349-A-D [NP]</td>
<td>4</td>
<td>Work Experience (total of 4 units)**</td>
</tr>
<tr>
<td>AG 249 [NP]</td>
<td>4</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

OR

II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200 [1]</td>
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</tr>
<tr>
<td>ANSC 200 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>NR 200 [NP]</td>
<td>4</td>
</tr>
<tr>
<td>ANSC 234 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 236 [2]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 230 [1]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 235 [2]</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 200 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>AG 249 [NP]</td>
<td>4</td>
</tr>
<tr>
<td>AGE 225 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>AGE 210 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>AGE 220 [2,3,4]</td>
<td>3</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 230 [1]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 214 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 234 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 235 [2]</td>
<td>3</td>
</tr>
<tr>
<td>AGE 220 [1,4]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 232 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 236 [2]</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 4 UNITS

Any 200 level Animal Science class that is not listed above
Any 200 level Agriculture Economics class not listed above
Any Agriculture class not used in Area II; for Breadth Core no more than two units of 300 level Agriculture Classes

TOTAL UNITS FOR MAJOR ................................................................. 30

**Required

Recreational Land Management

PROGRAM

Certificate of Achievement:

Recreational Land Management

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349-A-D [NP]</td>
<td>4</td>
<td>Work Experience (total of 4 units)**</td>
</tr>
<tr>
<td>AG 249 [NP]</td>
<td>4</td>
<td>Agriculture Internship**</td>
</tr>
</tbody>
</table>

OR

II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 200 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>NR 200 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>AG 285 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>NR 220 [1]</td>
<td>3</td>
</tr>
<tr>
<td>NR 200 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>NR 379 [NP]</td>
<td>3</td>
</tr>
</tbody>
</table>

III. MAJOR REQUIRED COURSES FOR CERTIFICATE - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>AG 285 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>AGM 215 [NP]</td>
<td>2</td>
</tr>
<tr>
<td>EHS 276 [NP]</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 35

**Required
A.S. Degree: Recreational Land Management

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER REQUIRED - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
<td></td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP]</td>
<td>Work Experience (total of 4 units)**</td>
<td>OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP]</td>
<td>Agriculture Internship**</td>
<td></td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH REQUIRED - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>[1,2]</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>[1,2]</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[NP]</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>[NP]</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>[NP]</td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>[NP]</td>
<td>Agricultural Accounting and Analysis</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR REQUIRED - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 230</td>
<td>[2]</td>
<td>Outdoor/Forest Recreation</td>
</tr>
<tr>
<td>NR 222</td>
<td>[2,3]</td>
<td>Native Tree &amp; Shrub Identification</td>
</tr>
<tr>
<td>NR 220</td>
<td>[1]</td>
<td>Introduction to Forestry</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVE - COMPLETE 7 UNITS

Any course not already taken in Area III. above

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHS 276</td>
<td>[2]</td>
<td>Landscape Maintenance</td>
</tr>
<tr>
<td>AG 280</td>
<td>[NP]</td>
<td>Agriculture Computations</td>
</tr>
<tr>
<td>AGM 230</td>
<td>[NP]</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>AG 285</td>
<td>[NP]</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>AGM 215</td>
<td>[NP]</td>
<td>Machinery Management</td>
</tr>
<tr>
<td>HE 100</td>
<td>[4]</td>
<td>Standard First Aid/CPR</td>
</tr>
<tr>
<td>AGM 222</td>
<td>[NP]</td>
<td>Compact Power Equipment Repair</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR MAJOR ........................................................................ 30

Soil Science PROGRAM

In this program the student will develop skills and knowledge for entry-level employment in fields of soil and water management. These fields may include conservation, analysis, survey and farm management, as well as related fields such as range management, hydrology, irrigation, drainage, fertilization, and rural and urban planning. This program will also prepare the student for transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

A.S. Degree: Soil Science

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
<td>Introduction to Agricultural Education and Careers</td>
<td></td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP]</td>
<td>Work Experience (total of 4 units)**</td>
<td>OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP]</td>
<td>Agriculture Internship**</td>
<td></td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>[1,2]</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>[1,2]</td>
<td>Introduction to Animal Science</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[1,2]</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>[3,4]</td>
<td>Agriculture Accounting and Analysis</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>[3,4]</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>[3,4]</td>
<td>Agriculture Computer Applications</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

Complete 4 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 200</td>
<td>[1,2]</td>
<td>Soils</td>
</tr>
</tbody>
</table>

Complete 5 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 235</td>
<td>[3,4]</td>
<td>Irrigation &amp; Drainage</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>[3,4]</td>
<td>Plant Nutrition &amp; Fertilizers</td>
</tr>
<tr>
<td>PLSC 230</td>
<td>[1,2]</td>
<td>Fruit Science</td>
</tr>
<tr>
<td>PLSC 205</td>
<td>[1,2]</td>
<td>Field Crops</td>
</tr>
<tr>
<td>NR 220</td>
<td>[3,4]</td>
<td>Introductory Forestry</td>
</tr>
<tr>
<td>PLSC 241</td>
<td>[3,4]</td>
<td>Viticulture</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 222</td>
<td>[1,2]</td>
<td>Native Tree &amp; Shrub Identification</td>
</tr>
<tr>
<td>NR 224</td>
<td>[3,4]</td>
<td>Introduction to Forestry Measurement</td>
</tr>
<tr>
<td>EHS 210</td>
<td>[1,2]</td>
<td>Introduction to Environmental Horticulture</td>
</tr>
<tr>
<td>PLSC 255</td>
<td>[3,4]</td>
<td>Plant Pest Control</td>
</tr>
<tr>
<td>AGM 230</td>
<td>[1,2]</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>[3,4]</td>
<td>Plant Disease Control</td>
</tr>
<tr>
<td>AGEC 146</td>
<td>[3,4]</td>
<td>Agriculture, Environment &amp; Society</td>
</tr>
</tbody>
</table>

Any course not already taken in Area III. above

UNITS IN A.S. MAJOR ........................................................................... 30
Veterinary Technician PROGRAM

In this program, the student will develop skills and knowledge for entry level employment in the field of veterinary technology. This field may include small and exotic animal care, veterinary laboratory procedures and surgical techniques as well as x-ray technology, specialty animals, large animals and veterinary office procedures. This program will also assist the student in qualification for the California Registered Veterinary Technician Examination by providing the educational requirements mandated by the Veterinary Medical Board.

Certificate of Achievement:
Veterinary Technician

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 17 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 250</td>
<td>2</td>
<td>Veterinary Physiology, Anatomy, and Terminology</td>
</tr>
<tr>
<td>ANSC 251</td>
<td>3</td>
<td>Veterinary Pharmacy Procedures</td>
</tr>
<tr>
<td>ANSC 252</td>
<td>4</td>
<td>Veterinary Equipment: Operation Instrumentation and Safety</td>
</tr>
<tr>
<td>ANSC 253</td>
<td>NP</td>
<td>Veterinary Laboratory Procedures</td>
</tr>
<tr>
<td>ANSC 254</td>
<td>4</td>
<td>Veterinary Medical Office Procedures</td>
</tr>
<tr>
<td>ANSC 255</td>
<td>3</td>
<td>Preparation for Surgical and Dental Assistance</td>
</tr>
<tr>
<td>ANSC 256</td>
<td>3</td>
<td>Veterinary Assistance and Nursing: Emergency Procedures</td>
</tr>
<tr>
<td>ANSC 257</td>
<td>4</td>
<td>Veterinary Assistance &amp; Nursing: Animal Handling</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – (NOT REQUIRED FOR CERTIFICATE)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>NP</td>
<td>General Biology</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>NP</td>
<td>Intro to Animal Science (Large animal oriented)</td>
</tr>
<tr>
<td>ANSC 215</td>
<td>NP</td>
<td>Animal Health &amp; Sanitation (Large animal oriented)</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD………………. 17

- NOTE: To become a registered veterinary technician, students must meet specific requirements established by the AVMA (American Veterinary Medical Association). Please contact the MJC Agriculture Division office for advising.
Dental Assisting PROGRAM

The Dental Assisting Program at Modesto Junior College prepares students to take the Dental Assisting National Board Examination (DANB) to become a Certified Dental Assistant (CDA) and the California State Board Examination, leading to Licensure as a Registered Dental Assistant (RDA). A Radiation Safety certificate is issued by Modesto Junior College. This program is accredited nationally by the American Dental Association's Commission on Dental Accreditation, and on a state level by the Dental Board of California.

Program expenses vary for each individual. The estimated cost for the Dental Assisting Program is $1,500 per semester, which includes enrollment and materials fees, health clearance, uniforms, books, and licensure and certification examinations. If you would like information on Financial Aid, call (209) 575-7700.

The Dental Assisting Program begins in the fall semester of each year. It is a full-time, 9-month program. An A.S. Degree in Dental Assisting is also available. For additional program information, contact Allied Health at (209) 575-6362. For academic advising contact the Counseling Center, (209) 575-6080.

Eligibility And Preparation for the Dental Assisting Program

- Admission to Modesto Junior College
- High School Graduation or Equivalent (GED or College Degree). If you have transcripts on file verifying a college degree, you do not need to have your high school transcripts on file.
- Transcripts on File in the MJC Records Office
  All transcripts (high school or equivalent and other colleges) must be on file in the MJC Records Office, prior to the Program application deadline. The Records Office will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Recommended Competencies (for Certificate of Achievement)

Complete English, math and reading assessment requirements by the program application deadline. The following competencies are recommended for success in the Dental Assisting Program.

**ENGLISH COMPETENCY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 49</td>
<td>Basic Composition and Reading (C or better)</td>
<td>5 OR Eligibility for ENGL 50 on assessment test</td>
</tr>
</tbody>
</table>

**MATH COMPETENCY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 10</td>
<td>Introduction to Mathematics (C or better)</td>
<td>4 OR Eligibility for Math 20 on assessment test</td>
</tr>
</tbody>
</table>

**READING COMPETENCY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>READ 184</td>
<td>Critical Reading (C or better)</td>
<td>5 OR Reading competency (70) on Accuplacer OR (12) on DFLS OR completion of a college degree from an accredited United States college</td>
</tr>
</tbody>
</table>

Program Prerequisites

(None required)

Program Application

Applications are available online or from Allied Health:

**February 1 - April 15**

Applications will continue to be accepted until the program is full or until August 15.
Selection Process for the Program

In the event there are more qualified applicants than spaces available in the program, a random selection process will be implemented to select the candidates.

Additional Requirements

For Accepted Applicants Only

Accepted applicants will receive a letter with a Health Clearance form and information regarding the Health Clearance and CPR Certification.

Health Clearance

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

CPR Certification

The Dental Assisting program will offer a CPR course for all accepted applicants. Details regarding date, time, location, and cost will be included in the acceptance letter. CPR certification must be from the American Heart Association or the Red Cross; for infant, child, and adult; eligible for recertification; and remain current throughout the program.

Scholastic Requirements

Continuation in the Dental Assisting Program is dependent upon completion of all Program required courses with a C or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to meet certification requirements.

Policy For Denial Of Certification/Licensure

The Dental Board of California and the Dental Assisting National Board reserves the right to deny application of certification/licensure for specific crimes and/or actions. Anyone considering a career in dental assisting, who might be denied certification/licensure, is advised to discuss this issue with the respective Boards prior to entering the Dental Assisting Program.

Dental Assisting Curriculum

- Students are strongly advised to complete a general computer literacy or beginning word processing course (recommended CMPSC 201 or OFADM 330) prior to entering the program.

Certificate of Achievement: Dental Assisting

REQUIRED COURSES (NON DENTAL ASSISTING)

- ENGL 50 Basic Composition and Reading .......................................................... 5 OR
- ENGL 101 Composition and Reading ............................................................... 3
- PSYCH 51 Psychology in Everyday Life ............................................................ 3

REQUIRED COURSES (DENTAL ASSISTING)

(Fall Semester)
- DTAST 360 Introduction to Dental Assisting ....................................................... 3
- DTAST 361 Prevention of Disease Transmission .................................................. 2
- DTAST 362 Dental Science ..................................................................................... 3
- DTAST 363 Introduction to Clinical Dentistry ..................................................... 2
- DTAST 364 Dental Materials ................................................................................ 2
- DTAST 365 Theory of Dental Radiology ............................................................... 3

(Spring Semester)
- DTAST 366 Administrative Dental Assisting ..................................................... 2
- DTAST 367 Expanded Functions ......................................................................... 2
- DTAST 368 Advanced Dental Assisting ............................................................. 3
- DTAST 369 Clinical Dental Radiology .................................................................. 3
- DTAST 370 Clinical 1 ............................................................................................ 6

(Summer Session)
- DTAST 371 Clinical 2 ......................................................................................... 1

TOTAL UNITS REQUIRED FOR CERTIFICATE .............................................. 38-40

A.S. Degree: Dental Assisting

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway* (p.71) or the University Preparation Pathway* (p. 69) which include completion of the Dental Assisting Certificate coursework above. Consult with an advisor for selection of courses.

Required Competencies for A.S. Degree (New)

WRITING COMPETENCY (SATISFY ONE.)

- Completion of ENGL 101 or equivalent course from another institution with a C or better
- Score of 3, 4, or 5 on AP Exam: Language & Composition OR Literature & Composition

MATH COMPETENCY FOR ASSOCIATE DEGREE (Satisfy one.)

- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process OR
- Score of 3, 4, or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics OR
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor's degree or those planning to enter a dental hygiene program) OR
- Completion of MATH 80 and MATH 80 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is not recommended for those students who eventually plan to pursue a bachelor's degree or enter a dental hygiene program).

READING COMPETENCY (Satisfy one.)

- Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IG ETC) with a C average or better OR
- Completion of READ 184 with a C or better

* If you do not have catalog rights prior to Summer 2009, you will need to meet the required competencies listed above for an A.S. Degree. See “Catalog Rights” on page 11.

TOTAL UNITS REQUIRED FOR A.S. DEGREE ................................................. 60

*The Health Education requirement has been waived for all Allied Health certificates and degrees.
The Medical Assisting Program

The Modesto Junior College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistant’s Endowment (AAMAE).

Commission on Accreditation of Allied Health Education Programs
35 East Wacker Drive, Suite 1970
Chicago, IL 60601-2208
(312) 553-9355
www.caahep.org

This program prepares students to take the national certification exam offered by the AAMA to become a Certified Medical Assistant (CMA). Medical assisting students at MJC receive transferable college credit for coursework. Many of the program graduates further their education by obtaining an A.S. Degree in Medical Assisting and/or Nursing.

The estimated program cost of $1500 includes a $20/unit enrollment fee, as well as materials, health clearance, uniform, books and certification exam expenses. Program cost at Modesto Junior College is very competitive with the cost of medical assisting programs offered by local trade schools. If you would like information on Financial Aid, call 575-7700.

The Medical Assisting Program begins in the fall semester of each year. It is a full-time, eight-month, certificate program offering training in administrative (front) and clinical (back) office procedures. In addition to the reasonable cost of this program, students of Modesto Junior College have the added benefit of college credit and comprehensive student services. For additional program information, call Allied Health, 575-6362. For academic advising, contact Shirley Buzbee, Medical Assisting Program Director, 575-6377.

Eligibility And Preparation for the Medical Assisting Program

- Admission To Modesto Junior College
- High School Graduation Or Equivalent (GED or College Degree)
  If you have transcripts on file verifying a college degree, you do not need to have your high school transcripts on file.
- Transcripts on File in the MJC Records Office
  All transcripts (high school or equivalent and other colleges) must be on file in the MJC Records Office, prior to the Program application deadline. The Records Office will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Recommended Competencies (for Certificate of Achievement)

Complete English, math and reading assessment requirements by the program application deadline. The following competencies are recommended for success in the Medical Assisting Program.

<table>
<thead>
<tr>
<th>ENGLISH COMPETENCY</th>
<th>MATH COMPETENCY</th>
<th>READING COMPETENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 49 (NP) Basic Composition and Reading (C or better)</td>
<td>MATH 20 (NP) Pre-algebra (C or better)</td>
<td>READ 184 (NP) Critical Reading (C or better)</td>
</tr>
</tbody>
</table>
| Eligibility for ENGL 50 on assessment test | Eligibility for Math 70 on assessment test | Reading competency (70) on Accuplacer OR (12) on DFL OR completion of a college degree from an accredited United States college.

Program Prerequisites

[None required]

Program Application

Applications are available online or from Allied Health:

February 1 - April 15

Applications will continue to be accepted until the program is full or August 15.

Selection Process for the Program

- In the event there are more qualified applicants than space available in the Program, a random selection process will be implemented to select the candidates.

Additional Requirements For Accepted Applicants Only

Accepted applicants will receive a letter with a Health Clearance form and information regarding the health clearance, criminal background check, drug screen and CPR certification.

Health Clearance

- A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

Criminal Background Check

Some externship sites may require students to provide a criminal background check Certificate of Verification before they will be allowed to participate in the externship portion of the program.

Drug Screen

All students participating in the externship experience may be required by the externship sites to pass a drug screen.

CPR Certification

The Medical Assisting Program will offer a CPR course for all accepted candidates. Details regarding date, time, location, and cost will be included in the acceptance letter. CPR certification must be from the American Heart Association; for the Healthcare Provider (infant, child and adult); eligible for recertification; and current throughout the program.

Scholastic Requirements

In order to be eligible for the National Certification Examination, all program requirements must be completed with a grade of C or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to be eligible to take the AAMA Certification Exam.
Policy For Denial Of Certification

Beginning with the January 2001 administration of the Certification Examination, felons are no longer eligible for the Certification Examination unless the American Association of Medical Assistants (AAMA) Certification Board grants a waiver based on one or more of the mitigating circumstances listed in the Disciplinary Standards. Any student considering a career in medical assisting, who has a criminal record, is advised to contact the AAMA for advisement prior to entering the Medical Assisting Program.

American Association of Medical Assistants
20 N. Wacker Drive, Suite 1575
Chicago, IL 60606-2903
(800) 228-2262
www.aama.ntl.org

Program Advisory

Students are strongly advised to complete the required curriculum listed under Required Courses (Non Medical Assisting) prior to entering the Medical Assisting program. These courses must be completed by the second semester of the program with a grade of C or better in order to complete the Medical Assisting program and be eligible to take the CMA exam.

Certificate of Achievement:
Medical Assisting

REQUIRED COURSES (NON MEDICAL ASSISTING)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP 50</td>
<td>Integrative Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 51</td>
<td>Psychology in Everyday Life</td>
<td>3 OR</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPCOM 102</td>
<td>Introduction to Human Communication</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

REQUIRED COURSES (MEDICAL ASSISTING)

[FALL SEMESTER]

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDAST 354</td>
<td>Intermediate Medical Coding / ICD9CM</td>
<td>3</td>
</tr>
<tr>
<td>MDAST 320</td>
<td>Introduction to Medical Assisting</td>
<td>3</td>
</tr>
<tr>
<td>MDAST 321</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MDAST 322</td>
<td>Medical Assisting Administrative Procedures</td>
<td>3½</td>
</tr>
</tbody>
</table>

(SPRING SEMESTER)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDAST 323</td>
<td>Medical Assisting Clinical Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR CERTIFICATE ........................................... 35½

A.S. Degree: Medical Assisting

- To earn an Associate in Science Degree in Medical Assisting, the student must complete the MJC Associate Degree Requirements* in addition to the Medical Assisting Certificate coursework. Consult with an advisor for selection of courses.

Required Competencies for A.S. Degree (New)

WRITING COMPETENCY (Satisfy one.)
- Completion of ENGL 101 or equivalent course from another institution with a C or better
- Score of 3, 4, or 5 on AP Exam: Language & Composition OR Literature & Composition

MATH COMPETENCY FOR ASSOCIATE DEGREE (Satisfy one.)
- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process OR
- Score of 3, 4 or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics OR
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor’s degree or those planning to enter a nursing program) OR
- Completion of MATH 80 and MATH 88 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is not recommended for those students who eventually plan to pursue a bachelor’s degree or enter the ADN program or the nursing program).

READING COMPETENCY (Satisfy one.)
- Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0) OR
- Completion of READ 184 with a C or better

* If you do not have catalog rights prior to Summer 2009, you will need to meet the required competencies listed above for an A.S. Degree. See “Catalog Rights” on page 11.

TOTAL UNITS REQUIRED FOR A.S. DEGREE........................................... 60

* The Health Education requirement has been waived for all Allied Health certificates and degrees.

Nursing: Associate Degree Nursing
PROGRAM (RN)

The Associate Degree Nursing (ADN) Program at Modesto Junior College prepares students to take the National Council Licensure Examination (NCLEX-RN), leading to licensure as a Registered Nurse (RN). The program is approved by the California Board of Registered Nursing.

The ADN Program begins in the fall and spring semesters of each year. It is a four-semester program. Although most classes are scheduled during the day, clinical experiences may include both morning and evening hours and weekends. During the five-week Preceptorship in NURSE 267, students will be expected to be in the clinical area on a full-time basis. Students must be flexible and prepared to accept these assignments.

Program expenses vary for each individual. The estimated start-up costs for the first semester of the ADN program is approximately $2,000, and $1,000 per semester for the 2nd, 3rd, and 4th semesters. These costs include enrollment and materials fees, criminal background check and drug screen fees, health clearance, uniforms, books, and pre-licensure readiness examination.
Eligibility and Preparation for the Associate Degree Nursing Program

- Admission to Modesto Junior College
- High School Graduation or Equivalent (GED or college degree)
- Official Transcripts on File in the MJC Records Office: All transcripts (high school or equivalent and other colleges) must be on file in the MJC Records Office, prior to the program application deadline. The Records Office will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Required Competencies

The two required competencies must be met by program application deadline.

MATH COMPETENCY

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 70 [NP]</td>
<td>5 OR</td>
</tr>
<tr>
<td>MATH 71 [NP]</td>
<td>3 AND</td>
</tr>
<tr>
<td>MATH 72 [NP]</td>
<td>3</td>
</tr>
</tbody>
</table>

**IMPORTANT**: Beginning with the 2010 program application period, applicants will required to satisfactorily complete MATH 90 to be eligible for the ADN Program.

Core Biology Repetitions:

Courses completed with a grade of “C” or higher will be counted as repetitions. If a student is permitted to repeat a course for a grade improvement in which the student initially received a “C” or higher, the highest grade will be used to calculate the core biology GPA.

Core Biology GPA:

All transferable lower division English courses are included in calculating this GPA.

College GPA:

All lower division courses with grades on transcripts are included in calculating this GPA.

College English GPA:

All transferable lower division English courses are included in calculating this GPA.

Chancellor’s Model

The MJC ADN Program uses the California Community College Chancellor’s Model for selection of program applicants. Applicants must achieve a Success Index score of 75 or higher to be qualified. Randomized selection will be used to select students from the pool of applicants with a score of 75 and above. The following four values are included in the selection formula for the Chancellor’s Model:

- College GPA
- College English GPA
- Core Biology GPA
- Core Biology GPA

Program Prerequisites

The following 4 prerequisites must be completed with a grade on transcript by the application deadline. All courses must be completed with a grade of “C” or better. A GPA of 2.6 or higher is recommended for the core biology prerequisites (ANAT 125, PHYSIO 101, and MICRO 101).

ANAT 125 Human Anatomy ................................................................. 5
MICRO 101 Microbiology ........................................................................ 4
PHYSIO 101 Introductory Human Physiology ............................................. 5
ENGL 101 Composition and Reading ...................................................... 3

Nursing Assessment/Readiness Test

All applicants will be required to take the Test of Essential Academic Skills (TEAS) which will measure skills in the content area domains of Reading, Mathematics, Science, and English Language Usage. Preparation materials are available from Assessment Technologies Institute (ATI) at www.atitesting.com. Current program applicants will be provided with detailed information on scheduling of the TEAS. A score of 67 or higher must be achieved on the TEAS.

Multiple Applications

If an applicant has applied to the program more than once, as a fully qualified applicant, the applicant’s name will be added to the lottery pool an additional time for each such application. An applicant is considered “fully qualified” if all admission requirements have been met, a complete application packet has been submitted by the application deadline, a score of 67 or higher has been achieved on the test of Essential Academic Skills (TEAS) and a Success Index score of 75 has been achieved on the Chancellor’s Model scoring formula.

Selection Process

Spring 2010 Deadline: August 31
Fall 2010 and Spring 2011 Deadline: May 31

Additional Requirements For Accepted Applicants Only

Accepted applicants will receive a letter with a Health Clearance Form and information regarding the health clearance, criminal background check, CPR certification and drug screening.

Health Clearance

A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 6 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.

- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

Program Application

Applications are available online or from Allied Health during the application periods listed below:

Spring 2010: August 1 – August 31
Fall 2010 and Spring 2011: May 1 - May 31

Applications must be received in Allied Health by the application deadlines listed above.
**Criminal Background Check**

All students participating in clinical assignments are required by acute care hospitals to complete a criminal background check and be cleared by the clinical facility in order to participate in the clinical experience.

**CPR Certification**

The ADN program will offer a Health Care Provider CPR class for all accepted applicants.

**Drug Screening**

All students participating in clinical assignments will be required to pass a drug screen.

**Scholastic Requirements**

Continuation in the ADN Program is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for the National Council Licensure Examination (NCLEX-RN).

**Denial Of Licensure**

The California Board of Registered Nursing protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. Statutory authority for denial of licensure is contained in the Business and Professions Code. Any student considering a career in nursing who has a criminal record is advised to access the current regulations on the Allied Health website (<www.mjc.edu/allied_health>) > Future Students> ADN Program> Denial of Licensure.

**Program Advisory**

Students are strongly advised to complete the required curriculum listed under Required Courses (Non-Nursing) and additional associate degree requirements prior to entering the ADN Program. These courses must be completed by the 4th semester of the program with a grade of C or better in order to complete the ADN program and be eligible to take the NCLEX-RN exam.

**Associate Degree Nursing Program Curriculum (for RN)**

**REQUIRED COURSES (NON NURSING)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 102</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 125</td>
<td>Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 150</td>
<td>Ethnicity and Culture in America</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 154</td>
<td>African-American Cultures and Communities</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 156</td>
<td>Mexican culture in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 102</td>
<td>Introduction to Human Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES (NURSING)**

**[FIRST SEMESTER]**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 260</td>
<td>Nursing Process: Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>NURSE 261</td>
<td>Nursing Process: Fundamentals</td>
<td>8</td>
</tr>
</tbody>
</table>

**[SECOND SEMESTER]**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 262</td>
<td>Nursing Process: Skills</td>
<td>1½</td>
</tr>
<tr>
<td>NURSE 263</td>
<td>Nursing Process: Maternity</td>
<td>4</td>
</tr>
<tr>
<td>NURSE 264</td>
<td>Nursing Process: Pediatrics</td>
<td>4½</td>
</tr>
</tbody>
</table>

**[THIRD SEMESTER]**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 265</td>
<td>Nursing Process: Medical-Surgical</td>
<td>6</td>
</tr>
<tr>
<td>NURSE 266</td>
<td>Nursing Process: Mental Health</td>
<td>4</td>
</tr>
</tbody>
</table>

**[FOURTH SEMESTER]**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 267</td>
<td>Nursing Process: Advanced Medical-Surgical</td>
<td>11</td>
</tr>
</tbody>
</table>

**Additional Associate Degree Requirements**

**A.S. Degree: Nursing/RN**

- To earn an Associate in Science Degree in Nursing/RN the student must complete the MJC Associate Degree Requirements* in addition to the Nursing/RN coursework. Consult with an advisor for selection of courses.

- NURSE 115: Introduction for Nursing Majors no longer meets the MJC Guidance Requirement, but it is recommended for success.

*The Health Education requirement has been waived for all Allied Health certificates and degrees.

**TOTAL UNITS REQUIRED FOR A.S. DEGREE**

69.5-71.5

**Required Competencies* for A.S. Degree (New)**

**MATH COMPETENCY FOR ASSOCIATE DEGREE (Satisfy one.)**

- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process
- Score of 3, 4 or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor’s degree or those planning to enter a bachelor’s degree program)

**NOTE:** MATH 80 and MATH 88 will not satisfy competency for the A.S. Degree in Nursing. Please see a Nursing advisor for more information.

**READING COMPETENCY (Satisfy one.)**

- Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0)
- Completion of READ 184 with a C or better

* If you do not have catalog rights prior to Summer 2009, you will need to meet the required competencies listed above for an A.S. Degree. See “Catalog Rights” on page 11.

**Nursing: LVN to ADN (RN) Advanced Placement PATHWAY**

The Licensed Vocational Nurse (LVN) to Associate Degree Nursing (ADN) Advanced Placement Pathway at Modesto Junior College prepares students to take the National Council Licensure Examination (NCLEX-RN) leading to licensure as a Registered Nurse (RN). The pathway is approved by the California Board of Registered Nursing.

The LVN to ADN Advanced Placement Pathway begins in the fall and spring semesters of each year. It is a two-semester pathway. Although most classes are scheduled during the day, clinical experiences may include both morning and evening hours. During the five-week preceptorship NURSE 267, students will be expected to be in the clinical area on a full-time basis. Students must be flexible and prepared to accept these assignments.

Pathway expenses vary for each individual. The estimated start-up cost for the first semester is approximately $2,000 and $1,000 for the second semester. These costs include enrollment and materials fees, clinical background check and drug screen fees, health clearance, uniforms, books and pre-licensure readiness examination. If you would like information on Financial Aid, call 575-7700. For academic advising contact Allied Health, 575-6362.
Eligibility And Preparation for the LVN to ADN Advanced Placement Pathway

- Admission To Modesto Junior College
- High School Graduation Or Equivalent (GED or College Degree)
  If you have transcripts on file verifying a college degree, you do not need to have your high school transcripts on file.
- Official Transcripts on File in the MJC Records Office
  All transcripts (high school or equivalent and other colleges) must be on file in the MJC Records Office prior to the Pathway application deadline. The Records Office will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Required Competencies

The two required competencies must be met by program application deadline.

**MATH COMPETENCY**

<table>
<thead>
<tr>
<th>Competency</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 70</td>
<td>Elementary Algebra (C or better) 5 OR</td>
</tr>
<tr>
<td>MATH 71</td>
<td>Elementary Algebra 1 (C or better) 3 AND</td>
</tr>
<tr>
<td>MATH 72</td>
<td>Elementary Algebra 2 (C or better) 3</td>
</tr>
</tbody>
</table>

**IMPORTANT:** Beginning with the 2010 Pathway application period, applicants will require to satisfactorily complete MATH 90 to be eligible for the ADN Pathway.

Required Competencies for A.S. Degree *(New)*

**WRITING COMPETENCY** (Satisfy one.)

- Completion of ENGL 101 or equivalent course from another institution with a C or better
- Score of 3, 4, or 5 on AP Exam: Language & Composition OR Literature & Composition

**MATH COMPETENCY FOR ASSOCIATE DEGREE** (Satisfy one.)

- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process OR
- Score of 3, 4 or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics OR
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor’s degree or those planning to enter a bachelor’s degree program)

**NOTE:** MATH 80 and MATH 88 will not satisfy competency for the A.S. Degree in Nursing. Please see a Nursing advisor for more information.

**READING COMPETENCY** (Satisfy one.)

- Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0) OR
- Completion of READ 184 with a C or better

*If you do not have catalog rights prior to Summer 2009, you will need to meet the required competencies listed above for an A.S. Degree. See “Catalog Rights” on page 11.

Pathway Prerequisites

The following 4 prerequisites must be completed with a grade on transcript prior to the program application deadline. All courses must be completed with a grade of C or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAT 125</td>
<td>Human Anatomy</td>
<td>5</td>
</tr>
<tr>
<td>MICRO 101</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>PHYSO 101</td>
<td>Introductory to Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td>3</td>
</tr>
</tbody>
</table>

The following prerequisite courses may be in progress at the time of application but must be completed prior to entering the ADN Program.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 259</td>
<td>VN Transition: Preparing for a Role Change</td>
<td>1</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Pathway Application

Applications are available online or from Allied Health during the application periods listed below:

- **For SPRING 2010 Application Period** AUGUST 1 - AUGUST 31
- **For FALL 2010 and SPRING 2011 Application Period** MAY 1 - MAY 31

Applications must be received in Allied Health by the application deadlines listed below.

- **SPRING 2010** AUGUST 31
- **FALL 2010 and SPRING 2011** MAY 31

Selection Process

LVN to ADN Advanced Placement Pathway applicants are selected on a space-available basis. Priority is given to applicants who have completed pathway prerequisites with grades on transcript at time of application.

Chancellor's Model

The MJC LVN to ADN Advanced Placement Pathway uses the California Community College Chancellor's Model for selection of pathway applicants. Applicants must achieve a Success Index score of 70 or higher to be qualified. Randomized selection will be used to select students from the pool of applicants with a score of 70 and above. The following four values are included in the selection process for the Chancellor's Model:

- **College GPA:** All lower division courses with grades on transcripts are included in calculating this GPA.
- **College English GPA:** All transfers English courses are included in calculating this GPA.
- **Core Biology GPA:** (ANAT 125, PHYSO 101, MICRO 101) The highest grade for the core biology courses (ANAT 125, PHYSO 101 and MICRO 101) will be used. If a student is permitted to repeat a course for a grade improvement in which the student initially received a “C” or higher, the highest grade will be used to calculate the core biology GPA.
- **Core Biology Repeitions:** The overall composite score is lowered for each unsuccessful attempt of the core biology coursework (NC, W, D, and F). Courses initially completed with “C” grades will not be counted as repetitions.

**Note:** The Chancellor's Model only penalizes students for repeats within 6 years of application to the program. NC, W, D and F grades in the core biology courses will not be counted as repeats if they are reasonably more than six years old.
Nursing Assessment/Readiness Test

All applicants will be required to take the Test of Essential Academic Skills (TEAS) which will measure skills in the content area domains of Reading, Mathematics, Science, and English and Language Usage. Preparation materials are available from Assessment Technologies Institute (ATI) at www.atitesting.com. Current pathway applicants will be provided with detailed information on scheduling of the TEAS. A score of 67 or higher must be achieved on the TEAS.

Multiple Applications

If an applicant has applied to the LVN to ADN Advanced Placement Pathway more than once, as a fully qualified applicant, the applicant’s name will be added to the lottery pool an additional time for each such application. An applicant is considered “fully qualified” if all admission requirements have been met, a complete application packet has been submitted by the application deadline, a score of 67 or higher has been achieved on the Test of Essential Academic Skills (TEAS) and a Success Index score of 70 has been achieved on the Chancellor’s Model scoring formula.

Additional Requirements for Accepted Applicants only

Accepted applicants will receive a letter with a Health Clearance form and information regarding the health clearance, criminal background check, CPR certification and drug screening.

Health Clearance

- A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 6 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

Criminal Background Check

All students participating in clinical assignments are required by acute care hospitals to complete a criminal background check and be cleared by the clinical facility in order to participate in the clinical experience.

CPR Certification

The ADN Program will offer a health care provider CPR class for all accepted applicants.

Drug Screening

All students participating in clinical assignments will be required to pass a drug screen.

Written And Skills Proficiency Testing

In selected cases, both written and skills proficiency testing may be required.

Program Advisory

Students are strongly advised to complete the required curriculum listed under Additional Associate Degree Requirements prior to entering the LVN to ADN Advanced Placement Pathway. These courses must be completed by the 4th semester of the program with a grade of C or better in order to complete the LVN to ADN Advanced Placement Pathway and be eligible to take the NCLEX-RN exam.

A.S Degree: LVN to ADN Advanced Placement Pathway Required Coursework

<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSE 265</td>
<td>Nursing Process: Medical-Surgical</td>
<td>6</td>
</tr>
</tbody>
</table>

A.S Degree: Nursing/LVN to ADN Advanced Placement Pathway

- To earn an Associate in Science Degree in Nursing the student must complete the MJC Associate Degree Requirements* in addition to the Nursing LVN to ADN Advanced Placement Pathway coursework. Consult with an advisor for selection of courses.
- NURSE 115: Introduction for Nursing Majors, no longer meets the Guidance requirement, but is recommended for success.

*The Health Education requirement has been waived for all Allied Health certificates and degrees.

Required Competencies for Pathway (New)

MATH COMPETENCY FOR ASSOCIATE DEGREE (Satisfy one.)

- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process OR
- Score of 3, 4 or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics OR
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor’s degree or those planning to enter a bachelor’s degree program)

NOTE: MATH 80 and MATH 88 will not satisfy competency for the A.S. Degree in Nursing. Please see a Nursing advisor for more information.

READING COMPETENCY (Satisfy one.)

- Completion of the applicable General Education pattern (MJC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0) OR
- Completion of READ 184 with a C or better

NOTE: An applicant who became an LVN by challenging the LVN Board must complete 30 college units in the nursing major and have a total of 60 college units in order to receive an A.S. Degree. Contact Allied Health for advising regarding this issue at (209) 575-6362.

TOTAL UNITS FOR LVN TO ADN ADVANCED PLACEMENT PATHWAY ……51½-53½

Scholastic Requirements

Continuation in the LVN to ADN Advanced Placement Pathway is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for the National Council Licensure Examination (NCLEX-RN).

Denial of Licensure

The California Board of Registered Nursing protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. Statutory authority for denial of licensure is contained in the Business and Professions Code. Any student considering a career in nursing who has a criminal record is advised to access the current regulations on the Allied Health website>Future Students>ADN Program>Denial of Licensure.

Nursing: LVN 30-Unit Option (LVN to RN)
In addition to the LVN to ADN Advanced Placement Pathway, there is also a LVN 30-Unit Option which prepares students to take the NCLEX-RN examination, but does not award an A.S. degree. Students interested in this option should contact the Director of Nursing in Allied Health for information and advising.

**Nursing: Nurse Assistant PROGRAM (CNA)**

The Nurse Assistant Program at Modesto Junior College is a one-semester course (NURSE 40, 5½ units) that includes 50 hours of classroom instruction and 100 hours of supervised clinical experience within the guidelines set by the State Department of Health Services. NURSE 40 is offered in the fall and spring semesters. After completing Nurse 40 with a C or better, students are eligible to take the certification examination to become a certified nurse assistant (CNA). The exam has been developed to meet the evaluation requirements of federal and state nurse aid and competency evaluation legislation. Red Cross testing is available at MJC at the end of each class.

Program expenses vary for each individual. The estimated cost for the Nurse Assistant Program is $600 that includes books, enrollment, health clearance, and certification examination and application fees. For financial aid information, call 575-7700. For inquiries about the program, call Allied Health, 575-6362.

**Eligibility And Preparation for the Nurse Assistant Program**

- Admission to Modesto Junior College
- High School Graduation or Equivalent (GED or College Degree)

**RECOMMENDED COMPETENCY**

The following competency is recommended for success in the Nurse Assistant Program.

<table>
<thead>
<tr>
<th>READ 184 [NP]</th>
<th>Critical Reading (C or better) ................................. 5 OR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reading competency (70) on Accuplacer ........................................ 5</td>
</tr>
<tr>
<td></td>
<td>(12) on DMTLS ........................................................................ 5</td>
</tr>
<tr>
<td></td>
<td>Completion of a college degree from an accredited United States college.</td>
</tr>
</tbody>
</table>

**PROGRAM PREREQUISITES** [NONE]

**PROGRAM APPLICATION** [NONE]

**Skills Recognition Award: Nurse Assistant**

**REQUIRED CURRICULUM**

<table>
<thead>
<tr>
<th>NURSE 40</th>
<th>Nurse Assistant ........................................................... 5½ AND</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSK 800</td>
<td>Nursing Skills Development ........................................... 0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ........................................ 5½

**Additional Requirements for Students Enrolled In NURSE 40**

**PLEASE NOTE:** Students enrolled in NURSE 40 will be given all necessary forms and instruction on the first day of class.

**Health Clearance**

- A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

**Fingerprinting and Criminal Background Check**

- All students participating in clinical assignments are required to complete a criminal background check and fingerprinting, and be cleared by the clinical facility in order to participate in the clinical experience. The students will not be charged for this requirement.

**Nurse Assistant Certification Application (HS-283B)**

- Nurse 40 students will receive required forms and instructions on completing the Department of Health Services application process.

**Policy For Denial Of Certification**

Individuals who have been convicted of certain penal code violations will not be certified unless the individual submits written evidence obtained from the court of “rehabilitation” (if a felony) or a dismissal of the violation (if a misdemeanor). If you have been convicted of one of these crimes, you should be aware that you cannot be certified unless you meet the specified conditions of rehabilitation or dismissal issued by the courts and have received approval from the Department of Health Services. All other convictions not listed, except minor traffic violations, are subject to department review and require that you submit additional information.

To request clearance for prior conviction(s) or disciplinary action, contact:

**Department of Health Services**

Licensing and Certification

ATCS MS 3201

PO Box 997416

Sacramento, CA 95899-7416

(916) 327-2445

www.dhs.ca.gov/lnc
Nursing: Vocational Nursing PROGRAM (for LVN)

The Vocational Nursing Program at Modesto Junior College is a 16-month (continuous) certificate program consisting of 8 hours of theory and 16 hours of clinical each week. Upon successful completion of the program, students will be eligible to take the NCLEX-PN examination to become a licensed vocational nurse (LVN). The program is approved by the Bureau of Vocational Nursing and Psychiatric Technicians.

The next Vocational Nursing Program start date is under review. For additional program information refer to the Allied Health website, www.mjc.edu/allied_health/vnp/index.html or contact the Allied Health office at (209) 575-6362. If you are just beginning your preparation for the nursing program and need academic advising, contact the Counseling Center (209) 575-6080 or the Allied Health office (209) 575-6314.

For information regarding program cost, contact the Workforce Training Center at (209) 575-6386.

Eligibility And Preparation for the Vocational Nursing Program

- Admission to Modesto Junior College  
- High School Graduation or Equivalent (GED or College Degree)  
  If you have transcripts on file verifying a college degree, you do not need to have your high school transcripts on file.  
- Official Transcripts on File in the MJC Records Office  
  All transcripts (high school or equivalent and other colleges) must be on file in the MJC Records Office, prior to the program application deadline. The Records Office will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Required Competencies for Admission

The following competencies must be met by the program application deadline.

- **MATH COMPETENCY**  
  - MATH 70 Eligibility (through MJC assessment process)……………………………………..OR  
  - MATH 20 (NP) Pre-Algebra (C or better)………………………………………………………..4 OR  
  - Equivalent or higher level math course (C or better)

- **READING COMPETENCY**  
  - MJC Reading Assessment (Accuplacer) Score of 70 ……………………………………....OR  
  - MJC Reading Assessment (DTLS) Score of 12 …………………………………………………..OR  
  - READ 184 (NP) Critical Reading (C or better)…………………..………………………………….OR  
  - College degree from an accredited United States college

- **ENGLISH COMPETENCY**  
  - ENGL 50 Eligibility (through MJC assessment process)……………………………………..OR  
  - ENGL 49 (NP) Basic English Skills (C or better)……………………………………………5 OR  
  - Equivalent or higher level English course (C or better)

Program Prerequisites

The following prerequisite courses must be completed with a grade on the transcript prior to the program application deadline. All courses must be completed with a grade of C or better. A GPA of 2.5 is required for MDAST 321 and AP 50.

- MDAST 321 Medical Terminology ………………………………………………………………..3
- AP 50 Elementary Anatomy & Physiology ……………………………………………………..3
- GUIDANCE Guidance course ……………………………………………………………………….½

Required Certification

A photocopy of your valid CNA certificate must be submitted with your Vocational Nursing Program application.

Program Application

For information on the next application period, refer to the Vocational Nursing Program’s website: www.mjc.edu/allied_health/vnp/index.html

Selection Process

The MJC Vocational Nursing Program uses a random selection process to select students from the pool of qualified applicants. Qualified applicants are those who have:

- Met the required competencies.
- Verification of high school graduation or equivalent.
- Completed the program prerequisites with a 2.5 GPA for MDAST 321 and AP 50.
- Submitted a valid CNA certificate with program application by application deadline.

Policy on Multiple Applications:

If an applicant has applied to the MJC Vocational Nursing Program more than once, as a fully qualified applicant, the applicant’s name will be added to the random selection an additional time for each such application.

Additional Requirements for Accepted Applicants Only

Accepted applicants will receive a letter with a Health Clearance form and information regarding the Health Clearance, Criminal Background Check, Drug Screen and CPR Certification.

Health Clearance:

- A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously
been obtained, a chest x-ray must be taken unless medically contraindicated.

Criminal Background Check:
All students participating in clinical assignments are required by acute care hospitals to:
• Complete a criminal background check and,
• Be cleared by the clinical facility in order to participate in the clinical experience.

Drug Screen:
All students participating in clinical assignments will be required to pass a drug screen.

CPR Certification:
The VN Program will offer a Health Care Provider CPR class for all accepted applicants.

Scholastic Requirements:
Continuation in the VN Program is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for the National Council Licensure Examination (NCLEX-PN).

Certificate of Achievement: Vocational Nursing

PREREQUISITE COURSES
MDAST 321 Medical Terminology ................................................................. 3
AP 50 Elementary Anatomy & Physiology .............................................. 3
GUIDANCE Guidance course ................................................................. 15

REQUIRED NURSING COURSES

[First Semester]
NURSE 350 Vocational Nurse 1 ............................................................... 14

[Second Semester]
NURSE 351 Vocational Nurse 2 ............................................................... 12

[Third Semester]
NURSE 352 Vocational Nurse 3 ............................................................... 13

[Fourth Semester]
NURSE 353 Vocational Nurse 4 ............................................................... 9
NURSE 354 Vocational Nurse 5 ............................................................... 2

TOTAL UNITS REQUIRED FOR CERTIFICATE ................................. 50

Policy on Denial of Licensure
The California Bureau of Vocational Nursing & Psychiatric Technicians protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. Statutory authority for denial of licensure is set out in Business and Professions Code. Any student, considering a career in nursing, who has a criminal record, is advised to contact the Bureau of Vocational Nursing & Psychiatric Technicians for advisement, prior to entering the Vocational Nursing Program.

BUREAU OF VOCATIONAL NURSING & PSYCHIATRIC TECHNICIANS
2535 Capitol Oaks Drive, Suite 205
SACRAMENTO, CA 95833
P.O. Box 94206
SACRAMENTO, CA 94206-2060
(916) 263-7800
www.bvnpt.ca.gov
Program Prerequisites

CHEM 143 Introductory College Chemistry

AP 150 Integrative Anatomy & Physiology (C or better)

(Aicot 125 & PHYSO 101, with a “C” or better, will be accepted in lieu of AP 150) NOTE: BIO 111 is a prerequisite for the anatomy, physiology, and microbiology courses.

Program Application

Students who have met/completed the requirements above may complete and submit a Respiratory Care Program Application to Allied Health within the application period:

- August 1 through October 15

Selection Process

In order to be fully qualified for admission, applicants must have completed the program prerequisites (see above) with a C or better at the time of application. In the event that there are more qualified applicants than space available, a weighted lottery system will be employed.

If the number of fully qualified applicants falls short of the number of available openings, provisionally qualified students will be eligible for admission. Students who have one or both of the prerequisites in progress at time of application may be provisionally qualified for acceptance into the program based upon completing the prerequisites with a grade of C or better. On a space available basis, applicants who have completed CHEM 143 with a C or better, but have not completed the AP 150 prerequisite may enroll in RSCR 220 and AP 150 in the spring and if they pass both courses with a grade of C or better, they will be officially accepted into the program at the end of spring semester and will then enroll in RSCR 230 in the summer.

Additional Requirements For Accepted Applicants Only

- Accepted applicants will receive a letter with a Health Clearance form and information regarding the health clearance, criminal background check, drug screen, and CPR certification.

Health Clearance

- A medical history and physical examination completed by a physician, physician’s assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

Criminal Background Check

- All students participating in clinical assignments are required by acute care hospitals to complete a criminal background check and be cleared by the clinical facility in order to participate in the clinical experience.

Drug Screen

- All students participating in clinical assignments will be required to pass a drug screen.
CPR Certification

- CPR certification is not required in advance. It is offered as part of RSCR 220: Introduction to Respiratory Care Principles.

SCHOLASTIC REQUIREMENTS

- Continuation in the Respiratory Care Program is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for a Certificate of Completion.

Policy For Imposing Penalties For Denial Of Licensure

The law provides for denial of licensure for crimes or acts, which may in any way be related to patient care activities, i.e., sex crimes, drug crimes, alcohol or drug abuse, and crimes of violence. In such cases, it is the applicant’s responsibility to present sufficient evidence of rehabilitation to the Respiratory Care Board of California prior to taking the licensure examination. If the above violations are only misdemeanors, an in-house review and penalty determination may be performed and fines, warnings, letters, and/or probation may be issued without denial of a license. The Respiratory Care Board of California will screen applicants individually. Any student considering a career as a Respiratory Therapist who might be denied licensure is advised to consult the Disciplinary Guidelines (California Code of Regulations, 1399.374) published by the Respiratory Care Board of California before entering the program. This document is available on reserve in the MJC library. Further information on disciplinary guidelines may be obtained from:

Respiratory Care Board of California
444 North 3rd Street Suite 270
Sacramento, CA 95814
Toll Free in California (866) 375-0386
www.rcb.ca.gov/index.html

Program Advisory

Students are strongly advised to complete the required curriculum listed under Required Courses (Non-Respiratory Care) and additional associate degree requirements prior to entering the Respiratory Care Program. These courses must be completed by the last semester of the program with a grade of C or better in order to complete the Respiratory Care program and be eligible to take the certification and registration examination administered by the National Board for Respiratory Care.

A.S. Degree: Respiratory Care Program Curriculum

REQUIRED COURSES (NON-RESPIRATORY CARE)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MICRO 101</td>
<td>Microbiology (Prerequisite to RSCR 242)</td>
<td>4</td>
</tr>
</tbody>
</table>

REQUIRED COURSES (RESPIRATORY CARE)

| [SPRING] | | | |
|----------|------------------|-------|
| RSCR 220 | Introduction to Respiratory Care Principles | 5 |
| RSCR 230 | Clinical 1 | 1 |

| [FALL] | | | |
|--------|------------------|-------|
| RSCR 222 | Basic Cardiopulmonary Anatomy & Physiology | 3 |
| RSCR 224 | Respiratory Care Theory 2 | 5 |
| RSCR 222 | Clinical 2 | 3 |

A.S. Degree: Respiratory Care

To earn an Associate in Science Degree in Respiratory Care, the student must complete the MJC Associate Degree Requirements* in addition to the Respiratory Care coursework. Consult with an advisor for selection of courses.

*A.S. Degree: Respiratory Care Program Curriculum

Required Competencies for A.S. Degree (New)

If you do not have catalog rights prior to Summer 2009*, you will need to meet the required competencies listed below for an A.S. Degree. See “Catalog Rights” on page 11.

WRITING COMPETENCY (SATISFY ONE.)

- Completion of ENGL 101 or equivalent course from another institution with a C or better
- Score of 3, 4, or 5 on AP Exam: Language & Composition OR Literature & Composition

MATH COMPETENCY (SATISFY ONE.)

- Eligibility for entrance into any 100-level MATH course through MJC Assessment Process OR
- Score of 3, 4, or 5 on AP Exam: Calculus AB OR Calculus BC OR Statistics OR
- Completion of MATH 90 or higher-level MATH course, or equivalent course from another institution with a grade of C or higher (this option is recommended for those students who may eventually plan to earn a bachelor’s degree or those planning to enter a bachelor’s degree program)

NOTE: MATH 80 and MATH 88 will not satisfy competency for the A.S. Degree in Respiratory Care. Please see a Respiratory Care advisor for more information.

READING COMPETENCY (SATISFY ONE.)

- Completion of the applicable General Education pattern (MUC-GE, CSU-GE, and/or IGETC) with a C average or better (2.0) OR
- Completion of READ 184 (C or better)
The comprehensive MJC Art Program offers several areas of concentration: art history, ceramics, computer graphics, drawing, design, sculpture, watercolor painting, oil painting, museum studies, and photography. The program is designed to include pre-professional and professional courses, personal enrichment in specific art areas, and classes for students who plan an art-related career. Art courses help students develop a capacity for visual analysis and the ability to solve problems in new and creative ways.

A.A. Degree: Art

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Courses should be selected with the assistance of an Art faculty advisor. Students who plan to transfer to a four-year college or university should consult with an Art faculty advisor and a counselor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 120</td>
<td>[1]</td>
<td>Basic Drawing 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 124</td>
<td>[2]</td>
<td>Color and Design 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 160</td>
<td>[1]</td>
<td>Appreciation of Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 164</td>
<td>[NP]</td>
<td>History of Art 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 165</td>
<td>[NP]</td>
<td>History of Art 2</td>
<td>3</td>
</tr>
</tbody>
</table>

SUPPORT STAFF

Lee Bailey, Inst. Asst. II
Yan Yan Chan, PhD., Accompanist
John Giorgio, Lab Asst.
Donna Hazel, Support Staff II

degrees and/or certificates offered:

Art

- Art Gallery/Museum Studies
- Film
- Journalism (Print)
- Music
- Photography

Art Gallery/Museum Studies
Film
Journalism (Print)
Music
Photography

Radio Broadcasting
Speech Communication
Television Production
Theatre
Theatre, Design & Technical
Theatre Performance

ELECTIVE COURSES - COMPLETE 11 UNITS, NO MORE THAN 1 COURSE IN EACH AREA

DESIGN AND DRAWING AREA

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121</td>
<td>[2]</td>
<td>Basic Drawing 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 123</td>
<td>[2]</td>
<td>Figure Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 125</td>
<td>[3]</td>
<td>Color and Design 2</td>
<td>3</td>
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THREE-DIMENSIONAL ART AREA

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<th>Course</th>
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<th>Title</th>
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<tbody>
<tr>
<td>ART 108</td>
<td>[1]</td>
<td>Ceramics 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 110</td>
<td>[3]</td>
<td>Ceramics 3</td>
<td>3</td>
</tr>
<tr>
<td>ART 140</td>
<td>[1]</td>
<td>Sculpture 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 141</td>
<td>[2]</td>
<td>Sculpture 2</td>
<td>3</td>
</tr>
<tr>
<td>ART 142</td>
<td>[3]</td>
<td>Sculpture 3</td>
<td>3</td>
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PAINTING AND PRINTMAKING AREA

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<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 147</td>
<td>[3]</td>
<td>Painting 1 (In Acrylic)</td>
<td>3</td>
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<tr>
<td>ART 148</td>
<td>[2]</td>
<td>Painting 1 (In Oil)</td>
<td>3</td>
</tr>
<tr>
<td>ART 149</td>
<td>[3]</td>
<td>Oil Painting 2</td>
<td>3</td>
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ART HISTORY AND APPRECIATION AREA

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<th>Course</th>
<th>Code</th>
<th>Title</th>
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<tr>
<td>ART 150</td>
<td>[1]</td>
<td>Gallery Operation and Management</td>
<td>3</td>
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<tr>
<td>ART 160</td>
<td>[1]</td>
<td>Appreciation of Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 161</td>
<td>[NP]</td>
<td>American Art</td>
<td>3</td>
</tr>
</tbody>
</table>
Skills Recognition Award:

Art and Design PROGRAM

A.A. Degree: University Preparation, Emphasis in Art and Design (p. 87)

**Art Gallery/Museum Studies PROGRAM**

Skills Recognition Award:

**Art Gallery/Museum Studies**

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 8 UNITS**

<table>
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<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 150 [NP]</td>
<td>6</td>
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<tr>
<td>ART 199B [NP]</td>
<td>2</td>
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</table>

**ELECTIVE COURSES - COMPLETE 4 OR MORE UNITS**

**I. ART APPRECIATION/HUMANITIES - COMPLETE 3 UNITS**

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>ART 160 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ART 164 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN 101 [NP]</td>
<td>3</td>
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</table>

**II. STUDIO ART - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ART 120 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ART 102 [NP]</td>
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**III. ART HISTORY/HUMANITIES - COMPLETE 3 UNITS.**

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>ART 161 [NP]</td>
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<td>ART 162 [NP]</td>
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<tr>
<td>ART 163 [NP]</td>
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</tr>
<tr>
<td>ART 165 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ART 169 [NP]</td>
<td>3</td>
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**PHOTOGRAPHY AND COMPUTER GRAPHICS AREA**

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<th>Course</th>
<th>Units</th>
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<td>ART 103 [2]</td>
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<td>ART 170 [1]</td>
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<td>ART 181 [1]</td>
<td>3</td>
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<tr>
<td>ART 182 [2]</td>
<td>3</td>
</tr>
<tr>
<td>ART 172 [2]</td>
<td>3</td>
</tr>
<tr>
<td>ART 185 [3]</td>
<td>3</td>
</tr>
<tr>
<td>ART 186 [4]</td>
<td>3</td>
</tr>
<tr>
<td>ART 175 [3]</td>
<td>3</td>
</tr>
<tr>
<td>ART 1788 [3]</td>
<td>3</td>
</tr>
<tr>
<td>ART 178C [3]</td>
<td>2</td>
</tr>
<tr>
<td>ART 1780 [3]</td>
<td>4</td>
</tr>
</tbody>
</table>

**HUMANITIES PROGRAM**

A.A. Degree: University Preparation, Emphasis in Humanities (p. 175)

**Film PROGRAM**

- Film students get "hands-on" experience while learning to produce, direct, act as talent, shoot and edit a variety of film projects. In addition, qualified students can secure internships with the MJC TV-FILM production company or with local-regional television stations and film production companies. The MJC television and film facilities include a 3-camera television studio and control room, along with cameras and editing equipment to produce professional caliper projects.

**Skills Recognition Award: Film**

- To earn a Skills Recognition Award, the student must complete the coursework as indicated below. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 12 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 142 [2]</td>
<td>3</td>
</tr>
<tr>
<td>RATV 150 [1]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 150 [1]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 151 [1]</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 4 OR MORE UNITS**

**Complete 1-2 units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILM 153 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 154 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 155 [NP]</td>
<td>3</td>
</tr>
</tbody>
</table>

**Complete 3 units**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 109 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 153 [NP]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 154 [1,2]</td>
<td>3</td>
</tr>
<tr>
<td>FILM 155 [NP]</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR SKILLS RECOGNITION AWARD**

16
PROGRAMS IN ARTS, HUMANITIES, AND COMMUNICATIONS

Journalism PROGRAM

The Program in Print Journalism is designed to develop in students the skills and attributes of the professional journalist, particularly those working in print media: newspapers, magazines and online publications. Writing and reporting, research and analysis, design and technical skills relating to the visual presentation of the news, are all equally important in this program. The AA degree in Communications / Print Journalism, is oriented towards developing a broader awareness of current events and contemporary culture, the ability to write publishable articles in a range of writing styles, and both a theoretical and practical understanding of the form and function of the American news media. The Certificate in Print Journalism trains students in the writing style that is the professional standard, covering the news, preparing publications, principles of typography and in newspaper and magazine layout, preparing them for entry level jobs in the news media. Working on the Modesto Junior College newspaper, a core class in both the AA degree and certificate sequences, is a hands-on practicum in newspaper publishing in which the reality of producing fast, fair and ethical journalism on deadline is simulated. Students often go on to internships and jobs with the local media.

Skills Recognition Award: Print Journalism

- To earn a Skills Recognition, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 12 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 150</td>
<td>Introduction to Mass Communication</td>
<td>3</td>
</tr>
<tr>
<td>JRNAL 100</td>
<td>Reporting and Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>JRNAL 120C</td>
<td>Newspaper Production Staff</td>
<td>3</td>
</tr>
<tr>
<td>CGR 211</td>
<td>Typography 1 (PageMaker and QuarkXpress)</td>
<td>2</td>
</tr>
<tr>
<td>LR 120</td>
<td>Library Research on the World Wide Web</td>
<td>1</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 138</td>
<td>Writing for Radio and Television</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>Publishing on the World Wide Web</td>
<td>3</td>
</tr>
<tr>
<td>FILM 154</td>
<td>Movies with a Message</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 105</td>
<td>Creative Writing: Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 106</td>
<td>Creative Writing: Short Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 108</td>
<td>Creative Writing: Autobiography</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 178</td>
<td>Mass Media and the Public</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ................................................. 15

A.A. Degree: Journalism

- To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 19 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JRNAL 100</td>
<td>Reporting and Writing for the Media</td>
<td>3</td>
</tr>
<tr>
<td>JRNAL 120C</td>
<td>Student Newspaper Production Staff</td>
<td>3</td>
</tr>
<tr>
<td>RATV 150</td>
<td>Introduction to Mass Communications</td>
<td>3</td>
</tr>
<tr>
<td>RATV 138</td>
<td>Writing for Radio and Television</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 178</td>
<td>Mass Media and the Public</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 262</td>
<td>Exploring the World Wide Web</td>
<td>1</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>Publishing on the World Wide Web</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 331</td>
<td>Typography 2 (PageMaker and QuarkXpress)</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 252</td>
<td>Desktop Publishing for Computer Graphics</td>
<td>3</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR** ................................................................. 22

Music PROGRAM

The MJC Music Program offers courses for students wishing to earn an associate’s degree in music, general education courses for non-music majors, and courses designed for community members. These include a comprehensive curriculum of music theory and musicianship. Ensemble and production courses include Concert and Symphonic Bands, Day and Evening Jazz Bands, Concert and Chamber Choirs, Masterworks Chorus, Community Orchestra, Guitar Orchestra, opera/musical theatre productions, chamber music performances, and electronic music productions. The program also offers applied studies in piano, organ, harpsichord, guitar, voice, violin/viola, cello/bass, woodwinds, and brass/percussion, as well as survey courses such as Music Appreciation, Introduction to World Music, Introduction to American Popular Music, and History of Western Music.

Repeat Limitations on Applied Music and Ensemble Courses

The following limitations apply to all activities listed under Applied Music and Ensembles: each activity is limited to a maximum of four enrollments, regardless of the skill level of the individual courses. For example, a student may enroll, a) in beginning piano four times or b) twice in beginning piano and twice in intermediate piano. In either of these cases, the student cannot enroll in any additional piano courses because the maximum of four piano courses has been met. Students who have met the limit of repetition may audit the course by registering in the Community Education Office.

A.A. Degree: Music

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of the requirements below (except where listed as recommended). Students who plan to transfer to a four-year school are strongly advised to meet with a member of the music faculty.

**PROGRAM PREREQUISITES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 101</td>
<td>Music Fundamentals 1</td>
<td>3</td>
</tr>
<tr>
<td>MUST 111</td>
<td>Music Theory Review</td>
<td>1</td>
</tr>
</tbody>
</table>

SATISFACTORY SCORE on music theory placement examination offered during the first meeting of MUST 111 and MUST 121. Students who do not meet entrance proficiencies will be encouraged to enroll in MUST 101 or MUST 111 prior to enrollment in MUST 121.

**RECOMMENDED PREREQUISITES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 116</td>
<td>Rhythmic Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES IN MUSIC THEORY - COMPLETE 20 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 121</td>
<td>Music Theory 1</td>
<td>3</td>
</tr>
<tr>
<td>MUST 131</td>
<td>Aural Skills 1</td>
<td>1</td>
</tr>
<tr>
<td>MUST 122</td>
<td>Music Theory 2</td>
<td>3</td>
</tr>
<tr>
<td>MUST 132</td>
<td>Aural Skills 2</td>
<td>3</td>
</tr>
<tr>
<td>MUST 123</td>
<td>Music Theory 3</td>
<td>3</td>
</tr>
<tr>
<td>MUST 133</td>
<td>Aural Skills 3</td>
<td>1</td>
</tr>
<tr>
<td>MUST 124</td>
<td>Music Theory 4</td>
<td>3</td>
</tr>
<tr>
<td>MUST 134</td>
<td>Aural Skills 4</td>
<td>1</td>
</tr>
<tr>
<td>MUST 135</td>
<td>Pratico Musica</td>
<td>4</td>
</tr>
</tbody>
</table>

**ENSEMBLE-COMPLETE 4 OR 8° UNITS**

Any of the following* (repeated individually, or combined with each other to equal the required number of units—see Repeat Limitations above)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSE 145</td>
<td>Guitar Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUSE 155</td>
<td>Concert Choir</td>
<td>1</td>
</tr>
<tr>
<td>MUSE 161</td>
<td>Community Orchestra</td>
<td>1</td>
</tr>
<tr>
<td>MUSE 175</td>
<td>Symphonic Band</td>
<td>2</td>
</tr>
<tr>
<td>MUSE 185</td>
<td>Jazz Band</td>
<td>1</td>
</tr>
</tbody>
</table>

*Students whose primary instrument is woodwinds, brass, or percussion and who intend to participate in the Symphonic Band as their primary ensemble must enroll for a total of 8 units.
APPLIED MUSIC - COMPLETE 4 UNITS

Any course listed under the Applied Music heading (MUSA) in the Catalog of Courses* (repeated individually, or combined with each other to equal the required number of units—see Repeat Limitations above)

*Music majors will typically combine ensembles and applied studies according to their primary instrument/voice. Vocalists will enroll in Concert Choir and the appropriate applied voice course. Orchestral instrumentalists will enroll in Community Orchestra and the appropriate applied strings course. Band instrumentalists will enroll in Symphonic Band and/or Jazz Band and applied woodwinds or brass/percussion. Guitars will enroll in Guitar Orchestra and the appropriate applied guitar class. Students are strongly advised to seek the advice of a music faculty member specializing in his/her primary instrument/voice when choosing ensemble and applied music courses.

PIANO** - COMPLETE 2 UNITS

Any of the following (repeated individually, or combined with each other to equal the required number of units—see Repeat Limitations above)

MUSA 121 [NP] Elementary Piano .................................................. 1
MUSA 122 [NP] Piano Enrichment .................................................. 1
MUSA 123 [NP] Intermediate Piano .............................................. 1
MUSA 124 [NP] Advanced Piano .................................................. 1

**Students whose primary instrument is piano may count their applied studies in piano toward this requirement.

TOTAL UNITS IN THE A. A. MAJOR IN ................................................................. 30 OR 34

RECOMMENDED MUSIC ELECTIVES

ENSEMBLE - COMPLETE 1-2 UNITS

Any ensemble other than the student's primary ensemble. (Students are advised to seek the advice of a faculty member directing that ensemble to determine if he/she has the appropriate experience to succeed in the ensemble.)

APPLIED MUSIC - COMPLETE 1-2 UNITS

Any applied music course other than that in the student's primary instrument/voice. (Students are advised to seek the advice of a faculty member specializing in that instrument/voice to determine which level of course is appropriate.)

OTHER - COMPLETE 1-3 UNITS

MUSG 121 [NP] History of Western Music 1............................................. 3
MUSG 122 [NP] History of Western Music 2.......................................... 3
MUSE 191 [NP] Conducting 1.............................................................. 1
MUSE 192 [NP] Conducting 2.............................................................. 1
MUSP 151 [NP] Musical Theatre Workshop........................................... 1
MUSP 153 [NP] Advanced Musical Theatre Workshop............................ 1

TOTAL OPTIONAL MUSIC ELECTIVES...................................................................... 3-7

Photography

PROGRAM

Photography is both an artistic and a technical vocation. This program is designed to develop the student’s aesthetic and technical abilities by working with design, composition, lighting, various types of image content, photographic processes, image critique, and presentation techniques.

A.A. Degree: Photography

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Courses should be selected with the assistance of a Photography faculty advisor. Students who plan to transfer to a four-year college or university should consult with a Photography faculty advisor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 18 UNITS

ART 124 [2] Color and Design 1........................................................... 3
ART 168 [1] Survey of Photography .................................................... 3
ART 170 [1] Basic Photography ............................................................ 3
ART 175 [3] Color Photography ............................................................ 3

ELECTIVE COURSES - COMPLETE AT LEAST 2 UNITS

ART 160 [1] Appreciation of Art .......................................................... 3
ART 161 [NP] American Art ................................................................. 3
ART 163 [NP] History of Modern Art ...................................................... 3
ART 164 [NP] History of Art 1 ............................................................... 3
ART 165 [NP] History of Art 2 ............................................................... 3
ART 168 [1] Survey of Photography ...................................................... 3
ART 175 [3] Color Photography ............................................................ 3 OR
ART 178B-D [3] Advanced Photography (can be repeated)................. 2-4
JRNAL 146B.C [NP] Newspaper photo staff ........................................ 2-3
CGR 221 [NP] Image Capture and Manipulation .................................... 3

UNITS IN A.A. MAJOR .................................................................................. 20

Radio Broadcasting

PROGRAM

Radio students at MJC learn in an environment designed to be as close to the “real world” of professional broadcasting as possible.

The Radio Broadcasting program is designed to teach students skills in production, announcing and writing. These courses are put to work on the campus radio station. MJC Pirates’ Radio is located in the Performing and Media Arts Center and operated daily by broadcasting students as a model commercial broadcast station employing FCC standards and practices. The Modesto area provides advanced students ample opportunities to internships, part-time employment and independent directed studies.

Skills Recognition Award:

Radio Broadcasting

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 13 UNITS

RATV 131 [1] Introduction to Radio Production ...................................... 3
RATV 132 [2] Advanced Radio Production 1 ......................................... 4
RATV 137 [NP] Radio Programming and Broadcast Announcing ............ 3
RATV 138 [NP] Writing for Radio and Television .................................... 3

ELECTIVE COURSES - COMPLETE 4 UNITS

Select one course from the following:

RATV 133 [3] Advanced Radio Production 2 ........................................ 4

If necessary, select one course from the following:

RATV 101 [NP] Basic Voice & Articulation ........................................... 3
RATV 134 [NP] Television Studio Production ......................................... 3
RATV 150 [NP] Introduction to Music Communication .......................... 3
CIMPGR 287 [NP] Introduction to Multimedia ....................................... 3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD........................................ 17
### A.A. Degree: Radio Broadcasting

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. (Student should consult with Radio Broadcasting advisor regarding choice of elective units.) Students who plan to transfer to a four-year college or university should consult with a Radio Broadcasting faculty advisor to ensure that all required transfer courses are completed.

**REQUIRED COURSES - COMPLETE 13 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 131</td>
<td>3</td>
<td>Introduction to Radio Production</td>
</tr>
<tr>
<td>RATV 132</td>
<td>2</td>
<td>Advanced Radio Production</td>
</tr>
<tr>
<td>RATV 137</td>
<td>3</td>
<td>Radio Programming and Broadcast Announcing</td>
</tr>
<tr>
<td>RATV 138</td>
<td>3</td>
<td>Writing for Radio and Television</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 14 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 101</td>
<td>3</td>
<td>Basic Voice and Articulation</td>
</tr>
<tr>
<td>RATV 133</td>
<td>4</td>
<td>Radio Production 2</td>
</tr>
<tr>
<td>RATV 150</td>
<td>3</td>
<td>Introduction to Mass Communication</td>
</tr>
<tr>
<td>THETR 120</td>
<td>3</td>
<td>Oral Reading and Interpretation</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR** ................................................... 20

### Speech Communication

#### PROGRAM

**Skills Recognition Award:**

**Speech Communication**

- To earn a Skills Recognition Award, the student must complete the following coursework: Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 12 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 100</td>
<td>3</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>SPCOM 102</td>
<td>3</td>
<td>Introduction to Human Communication</td>
</tr>
<tr>
<td>SPCOM 110</td>
<td>3</td>
<td>Persuasion</td>
</tr>
</tbody>
</table>

**CRITICAL THINKING AREA - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 104</td>
<td>3</td>
<td>Argumentation</td>
</tr>
<tr>
<td>SPCOM 107</td>
<td>3</td>
<td>Introduction to Debate</td>
</tr>
</tbody>
</table>

**GROUP AND ORGANIZATIONAL COMMUNICATION AREA - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 106</td>
<td>3</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>SPCOM 109</td>
<td>3</td>
<td>Communication &amp; Leadership Skills For Women in Management</td>
</tr>
</tbody>
</table>

**PROFESSIONAL SKILLS AREA - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 103</td>
<td>3</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>3</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ................................................... 12

### A.A. Degree: Speech Communication

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Student should consult with a Speech advisor for selection of Elective Units.

**REQUIRED COURSES - COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 102</td>
<td>3</td>
<td>Introduction to Human Communication</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>3</td>
<td>Fundamentals of Public Speaking</td>
</tr>
<tr>
<td>SPCOM 104</td>
<td>3</td>
<td>Argumentation</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 14 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 101</td>
<td>3</td>
<td>Basic Voice and Articulation</td>
</tr>
<tr>
<td>SPCOM 103</td>
<td>3</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>SPCOM 105</td>
<td>3</td>
<td>Forensics and Speech Activities Workshop</td>
</tr>
<tr>
<td>SPCOM 106</td>
<td>3</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>SPCOM 107</td>
<td>3</td>
<td>Introduction to Debate</td>
</tr>
<tr>
<td>SPCOM 109</td>
<td>3</td>
<td>Communication and Leadership Skills for Women in Management</td>
</tr>
<tr>
<td>SPCOM 110</td>
<td>3</td>
<td>Persuasion</td>
</tr>
<tr>
<td>SPCOM 120</td>
<td>3</td>
<td>Oral Reading and Interpretation</td>
</tr>
<tr>
<td>SPCOM 122</td>
<td>3</td>
<td>Introduction to Readers’ Theatre</td>
</tr>
<tr>
<td>SPCOM 123</td>
<td>3</td>
<td>Storytelling</td>
</tr>
<tr>
<td>SPCOM 124</td>
<td>3</td>
<td>Advanced Readers’ Theatre</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>3</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>SPCOM 145</td>
<td>3</td>
<td>Parliamentary Procedure</td>
</tr>
<tr>
<td>SPCOM 199</td>
<td>3</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR** ................................................... 20

### Television Production

#### PROGRAM

Modesto Junior College’s department of Television Production has been created to train students to work in the television, cable, film and video entertainment industry. Students get a variety of hand-on opportunities with course study in both studio and on-location television, film, and documentary production. Students will learn to produce, direct, act as talent, shoot and edit projects and programs that air on local cable channels. Advance television and film students are encouraged to submit their work in the television, cable, film and video entertainment industry. Students get a variety of hands-on opportunities with course study in both studio and on-location television, film, and documentary production. Students who enroll in the Television Production program get to explore new career paths that result from the development of new digital technologies. They will leave with the skills required for a promising career in the television/film and entertainment industry.

**Skills Recognition Award:**

**Television Production**

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 13 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 150</td>
<td>3</td>
<td>Introduction to Mass Communication</td>
</tr>
<tr>
<td>RATV 134</td>
<td>3</td>
<td>Television Production</td>
</tr>
</tbody>
</table>
A.A. Degree: Television Production

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 171) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 15 UNITS**

- RATV 134 [1] Television Studio Production ........................................... 3
- RATV 142 [2] Light, Sound, Camera and Editing Workshop ...................... 3
- RATV 150 [1] Introduction to Mass Communications ............................... 3
- FILM 150 [1] Film Production .................................................................. 3

**ELECTIVE COURSES - COMPLETE 5 UNITS**

- FILM 151 [2] Advanced Film Production 1 ........................................... 3
- RATV 101 [NP] Basic Voice and Articulation ........................................... 3
- RATV 131 [1] Radio Control Room & Studio Production ........................... 3
- RATV 137 [NP] Radio and Television Announcing .................................... 3
- RATV 138 [NP] Writing for Radio and Television ...................................... 3
- RATV 141 [NP] Documentary Production ................................................ 3

**TOTAL UNITS IN A.A. MAJOR ......................................................... 20**

A.A. Degree: Theatre

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 171) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Students should consult with a Theatre faculty advisor to ensure that all required transfer courses are completed.

**REQUIRED COURSES - COMPLETE 8 UNITS**

- THEIR 100 [NP] Introduction to Theatre Arts ........................................... 3
- THEIR 161 [2] Theatre Production Workshop ........................................... 2

**ELECTIVE COURSES - COMPLETE 12 UNITS**

- THEIR 122 [1] Introduction to Readers' Theatre ........................................ 3
- THEIR 123 [3] Storytelling .................................................................. 3
- THEIR 150 [NP] Elements of Playwriting ............................................... 3
- THEIR 165 [NP] Imprisonmental Acting .................................................. 3
- THEIR 175 [NP] History of the American Musical Theatre ....................... 3
- THEIR 177 [NP] Stage Costuming ........................................................... 3
- THEIR 178 [3] Introduction to Scenery Design ......................................... 3
- THEIR 182 [3] Practical Stage Lighting .................................................... 3
- THEIR 183 [NP] Fundamentals of Stage Make-Up 1 ................................ 1
- THEIR 184 [NP] Fundamentals of Stage Make-Up 2 ................................ 1
- THEIR 190A [NP] Theatre Production Workshop .................................... 1
- THEIR 192 [NP] Rehearsal and Performance .......................................... 2
- THEIR 196 [NP] Theatre Management .................................................... 1
- THEIR 198 [NP] Special Topics ............................................................... 1-3

**TOTAL UNITS IN A.A. MAJOR ......................................................... 20**

Skills Recognition Award: Design & Technical Theatre

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 15 UNITS**

- THEIR 100 [NP] Introduction to Theatre Arts ........................................... 3
- THEIR 175 [1] Stage Costuming ............................................................... 3
- THEIR 178 [2] Introduction to Scenery Design ......................................... 3
- THEIR 182 [1] Practical Stage Lighting .................................................... 3
- THEIR 183 [2] Fundamentals of Stage Make-Up 1 ................................ 1
- THEIR 190A [NP] Theatre Production Workshop .................................... 1

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 15**

Skills Recognition Award: Theatre Performance

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 6 UNITS**


**ELECTIVE COURSES - COMPLETE 9 UNITS**

- THEIR 122 [1] Introduction to Readers' Theatre ........................................ 3
- THEIR 123 [NP] Storytelling .................................................................. 3
- THEIR 131 [NP] Fundamentals of Choreography ...................................... 3
- THEIR 195 [NP] Movement for the Performing Artist ............................... 3

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 15**
Ken White, PhD, Dean  
Business, Behavioral, & Social Sciences Division

### Educational Programs in Behavioral & Social Sciences

Ken White, PhD, Dean  
Business, Behavioral, & Social Sciences Division

#### FACULTY
- Kevin Alavezos
- Bill Anelli
- Nancy Backlund
- Debra Bolter, Ph.D.
- Frank Drummond
- Shelly Fichtenkort, Ph.D.
- Rebecca Ganes
- Chris Groth
- Joel Hagen
- Greg Hausmann
- Richard Higginbotham
- Dale Hoagland
- Cecelia Hudelson-Putnam
- Bobby Hutchison
- Kimberly Kennard-Lyke, DSW
- Susan Ker, PhD
- Linda Knopp
- Rose LaMont
- Brian Larson
- Curtis Martin
- James McCarty, PhD.
- Steven Miller, PhD.
- Eva Mo
- Joseph Monast, PhD.
- William Newell, PhD.
- Teri Nicoll-Johnson
- Dale Phillips
- Roman Salazar
- Kathleen Short
- Nancy Sill
- Bjan Sinclair
- Al Smith
- Stanley Spector, PhD.
- Richard Sweeney
- James Todd
- Chris Vaughn
- Lloyd Vaughn
- Sandra Woodside
- John Zamora

#### SUPPORT STAFF
- Mandy Landis, Secretary III
- Haley Radovich, Admin. Sec.
- Ken Sholar, Lab Asst. I
- Don Rousseau, Program Rep. I
- Wendy Towers, Program Rep. II
- Cheryl Dupuis, Program Rep. I

### Administration of Justice PROGRAM

Modesto Junior College offers a comprehensive Administration of Justice program. The curriculum addresses basic knowledge and skills required in the criminal justice area.

The two-year college program is designed to prepare candidates for employment or transfer to a four-year educational institution offering a major in one of the criminal justice fields. Satisfactory completion of the requirements will lead to the Associate in Arts degree or the Associate in Science degree. All candidates for degrees in Administration of Justice must consult with an Administration of Justice advisor to select the courses most appropriate for meeting both the MJC Associate Degree Requirements and the current demands of employing agencies and transfer institutions.

All courses are open to individuals who have been admitted to the college and who meet the prerequisites, unless specifically exempted by statute. Courses which involve the handling of firearms, mace, or baton are not open to individuals who have been convicted of a felony or who are mental patients. (Penal Code Section 12021. Students are also advised that some of the Administration of Justice courses include actual or simulated experiences which require considerable agility and physical ability. All candidates for degrees in Administration of Justice must consult with an Administration of Justice advisor to select the courses most appropriate for meeting both the MJC Associate Degree Requirements and the current demands of employing agencies and transfer institutions.

#### Degrees and/or Certificates Offered:
- Administration of Justice
- Chemical Dependency Counseling
- Ethnic Studies

#### INSTRUCTIONAL SUPPORT STAFF
- Penny Belus, Lab. Ass. II
- Andrea Porter, Lab. Asst. I
- Julie Bakus, Inst. Asst. II
- Todd Mathias, Inst. Asst. I
- Lattha Souvannaseng, Inst. Asst. I
- Elodia Fernandez, Inst. Asst. I
- Sandra Woodside

#### ABOUT THE DIVISION
- Offers in the Behavioral and Social Sciences Division are designed to meet the needs of transfer students, non-transfer students and community residents who desire general education courses. A student may complete an Associate of Arts degree in Behavioral and Social Sciences. All majors must complete a program of courses approved by the division. Faculty advisors from the division will assist students in the selection of proper courses.

#### A.A. Degree: Administration of Justice
- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 18 UNITS
- **ADJU 201** [1] Introduction to Administration of Justice ............................................ 3
- **ADJU 204** [3] Legal Aspects of Evidence ........................................................................... 3
- **ADJU 205** [1] Community Relations .............................................................................. 3
- **ADJU 206** [NP] Multicult. Issues within Public Safety ..................................................... 3
- **ADJU 210** [4] Communication in Criminal Justice ......................................................... 3
- **ADJU 211** [4] Criminal Investigation .............................................................................. 3
- **ADJU 212** [4] Communications/Firearms Training ......................................................... 3
- **ADJU 213** [1] Patrol Procedures .................................................................................. 3
- **ADJU 215** [1] Introduction to Firearms ............................................................................. 1½
- **ADJU 216** [NP] Firearms & Range Application ............................................................... 1½
- **ADJU 217** [2] Substance Abuse .................................................................................. 3
- **ADJU 218** [NP] Profiling Terrorism ................................................................................. 3
- **ADJU 222** [NP] Profiling Terrorism ................................................................................. 3
- **ADJU 234** [3] Crime Causation .................................................................................. 3
- **ADJU 235** [1] Introduction to Corrections ......................................................................... 3
- **ADJU 236** [2] Correctional Law .................................................................................. 3
- **ADJU 243** [NP] Domestic Violence Crisis Intervention ..................................................... 3
- **ADJU 351** [NP] Elements of Supervision in Public Safety ............................................. 3

### UNITS IN A.A. MAJOR ........................................................................................................... 21
A.S. Degree: **Administration of Justice**

- To earn an Associate in Arts Degree, the student must complete the MJC Associate Degree Requirements, in addition to completing the coursework below. Associate in Science degree candidates may select an option in either Law Enforcement (police, sheriff, etc.) or Corrections (prison, parole, probation, etc.).

### REQUIRED COURSES - COMPLETE 18 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>1</td>
<td>Introduction to Administration of Justice</td>
</tr>
<tr>
<td>ADJU 202</td>
<td>2</td>
<td>Prin. and Proc. of the Justice System</td>
</tr>
<tr>
<td>ADJU 203</td>
<td>3</td>
<td>Concepts of Criminal Law</td>
</tr>
<tr>
<td>ADJU 204</td>
<td>3</td>
<td>Legal Aspects of Evidence</td>
</tr>
<tr>
<td>ADJU 205</td>
<td>1</td>
<td>Community Relations</td>
</tr>
<tr>
<td>ADJU 212</td>
<td>4</td>
<td>Criminal Investigation</td>
</tr>
</tbody>
</table>

### ELECTIVE COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 145</td>
<td>NP</td>
<td>Community Agency Service</td>
</tr>
<tr>
<td>ADJU 145A-D</td>
<td>NP</td>
<td>Community Agency Practicum</td>
</tr>
<tr>
<td>ADJU 206</td>
<td>NP</td>
<td>Multicultural Issues within Public Safety</td>
</tr>
<tr>
<td>ADJU 210</td>
<td>4</td>
<td>Communication in Criminal Justice</td>
</tr>
<tr>
<td>ADJU 213</td>
<td>1</td>
<td>Patrol Procedures</td>
</tr>
<tr>
<td>ADJU 215</td>
<td>1</td>
<td>Introduction to Firearms</td>
</tr>
<tr>
<td>ADJU 216</td>
<td>NP</td>
<td>Firearms &amp; Range Application</td>
</tr>
<tr>
<td>ADJU 217</td>
<td>2</td>
<td>Substance Abuse</td>
</tr>
<tr>
<td>ADJU 222</td>
<td>NP</td>
<td>Profiling Terrorism</td>
</tr>
<tr>
<td>ADJU 232</td>
<td>2</td>
<td>Juvenile Justice Procedures</td>
</tr>
<tr>
<td>ADJU 234</td>
<td>3</td>
<td>Crime Causation</td>
</tr>
<tr>
<td>ADJU 235</td>
<td>1</td>
<td>Introduction to Corrections</td>
</tr>
<tr>
<td>ADJU 236</td>
<td>2</td>
<td>Correctional Law</td>
</tr>
<tr>
<td>ADJU 243</td>
<td>NP</td>
<td>Domestic Violence/Crisis Intervention</td>
</tr>
<tr>
<td>ADJU 351</td>
<td>NP</td>
<td>Elements of Supervision in Public Safety</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR A.S. MAJOR**: 30

Skills Recognition Award: **Ethnic Studies**

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

### REQUIRED COURSES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 102</td>
<td>NP</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>HIST 107</td>
<td>NP</td>
<td>World Civilizations</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>NP</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

### I. INTERNATIONAL STUDIES OPTION

**COMPLETE 9 UNITS, 3 UNITS FROM EACH CONCENTRATION:**

#### A. EXAMINING CULTURE THROUGH THE ARTS AND LITERATURE – COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 169</td>
<td>NP</td>
<td>History of Non-Western Art</td>
</tr>
<tr>
<td>ENGL 131</td>
<td>NP</td>
<td>Introduction to World Literature to 1500</td>
</tr>
<tr>
<td>ENGL 132</td>
<td>NP</td>
<td>Introduction to World Lit. from 1500 to Present</td>
</tr>
<tr>
<td>ENGL 151</td>
<td>NP</td>
<td>Folklore</td>
</tr>
<tr>
<td>ENGL 173</td>
<td>NP</td>
<td>Introduction to Latin American Literature</td>
</tr>
<tr>
<td>HUMAN 110</td>
<td>NP</td>
<td>East Meets West</td>
</tr>
<tr>
<td>MUSIC 169</td>
<td>NP</td>
<td>Introduction to World Music</td>
</tr>
<tr>
<td>THETR 102</td>
<td>NP</td>
<td>World Theater</td>
</tr>
<tr>
<td>THETR/PE194</td>
<td>NP</td>
<td>World Dance</td>
</tr>
</tbody>
</table>

#### B. EXAMINING HISTORICAL AND POLITICAL PERSPECTIVES – COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 208</td>
<td>NP</td>
<td>Introduction to International Business</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>NP</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>HIST 106</td>
<td>NP</td>
<td>World Civilizations</td>
</tr>
<tr>
<td>HIST 125</td>
<td>NP</td>
<td>History of Mexico</td>
</tr>
<tr>
<td>POLSC 110</td>
<td>NP</td>
<td>International Relations</td>
</tr>
</tbody>
</table>

#### C. EXPLORING CULTURAL AND SOCIOLOGICAL ISSUES – COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 140</td>
<td>NP</td>
<td>Magic, Witchcraft, &amp; Religion</td>
</tr>
<tr>
<td>ANTHR 150</td>
<td>NP</td>
<td>Native People of North America</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>NP</td>
<td>Cultural Geography</td>
</tr>
<tr>
<td>HUMAN 130</td>
<td>NP</td>
<td>Introduction to Western Religions</td>
</tr>
<tr>
<td>SOCSC 105</td>
<td>NP</td>
<td>Women's Studies</td>
</tr>
</tbody>
</table>

### II. DOMESTIC STUDIES OPTION

**COMPLETE 9 UNITS, 3 UNITS FROM EACH CONCENTRATION:**

#### A. EXAMINING CULTURE THROUGH THE ARTS AND LITERATURE – COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 171</td>
<td>NP</td>
<td>Introduction to African American Literature</td>
</tr>
<tr>
<td>ENGL 172</td>
<td>NP</td>
<td>Introduction to Chicano Literature</td>
</tr>
<tr>
<td>ENGL 179</td>
<td>NP</td>
<td>Intro to Native American Lit, Mythology, and the Oral Tradition</td>
</tr>
<tr>
<td>HUMAN 120</td>
<td>NP</td>
<td>Culture, Diversity, &amp; Tolerance in the Arts</td>
</tr>
<tr>
<td>SPAN 112</td>
<td>NP</td>
<td>Introduction to Chicano/a Literature</td>
</tr>
</tbody>
</table>

---

**Chemical Dependency Counseling PROGRAM**

A.A. Degree: **Human Services**

Chemical Dependency Counseling

- To earn a Chemical Dependency Counseling certificate, the student must complete the courses detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.
**Human Services PROGRAM**

Certificate of Achievement: Human Services

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 27 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSR 103</td>
<td>Introduction to Human Service Careers</td>
<td>½</td>
</tr>
<tr>
<td>GUIDE 110</td>
<td>Educational Planning</td>
<td>½</td>
</tr>
<tr>
<td>HUMSR 101</td>
<td>Introduction to Human Services</td>
<td>½</td>
</tr>
<tr>
<td>HUMSR 110</td>
<td>Introduction to Interviewing, Counseling</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 102</td>
<td>Social Problems in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 116</td>
<td>Drugs and Alcohol in Society</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 120</td>
<td>Professional Development in the Helping Professions</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 150</td>
<td>Ethnicity &amp; Culture in America</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 156</td>
<td>Mexican Culture in the United States</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 145ABD</td>
<td>Community Agency Practicum</td>
<td>1,2,4</td>
</tr>
<tr>
<td>PSYCH 110</td>
<td>Human Sexual Behavior</td>
<td>3 (OR)</td>
</tr>
<tr>
<td>PSYCH 130</td>
<td>Personal Adjustment</td>
<td>3 (OR)</td>
</tr>
<tr>
<td>PSYCH 141</td>
<td>Human Life Span</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.......................... 27**

**A.A. Degree: Human Services**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 17 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSR 101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 110</td>
<td>Introduction to Interviewing, Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 114</td>
<td>Death and Dying</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 145ABD</td>
<td>Community Agency Practicum</td>
<td>1,2,4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR A.A. MAJOR ................................................ 69**

**Geography PROGRAM**

**A.A. Degree: University Preparation, Emphasis in Geography**

(p. 175)

**Liberal Studies PROGRAM**

**A.A. Degree: University Preparation, Emphasis in Liberal Studies**

(p. 177)

(teacher Education at CSU Stanislaus)

**Psychosocial Rehabilitation PROGRAM**

The Psychosocial Rehabilitation (PSR) program comes from the emerging need in the human services field to recruit and hire qualified persons to provide services for people who have mental health problems, including consumers and family members as employees in the mental health system. Completion of the Psychosocial Rehabilitation program will provide the SKILLS RECOGNITION holder with a core curriculum of essential skills necessary for jobs in the human services field and provide the nine units of college credit necessary to sit for the national test-based certification exam, enabling people to become Certified Psychosocial Rehabilitation Practitioners. This core set of courses not only provides a basic education for people entering the human services profession but also provides training and growth opportunities for existing human service employees. In addition, this SKILLS RECOGNITION will serve as another step in an educational and career ladder leading to a Human Services SKILLS RECOGNITION and/Degree. All coursework will be applicable as electives and/or meet the requirements for the Human Services degrees at MJC.

**Skills Recognition Award:**

**Psychosocial Rehabilitation**

To earn a Skills Recognition award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 9 UNITS.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMSR 142</td>
<td>Introduction to Psychosocial Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 143</td>
<td>Applications of Psychosocial Rehabilitation Practice</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 144</td>
<td>Community Agency Practicum</td>
<td>1</td>
</tr>
<tr>
<td>HUMSR 145ABD</td>
<td>Community Agency Practicum</td>
<td>1,2, OR 4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION ...................................... 9**

**124**
Educational Programs in Business

Ken White, PhD, Dean
Business, Behavioral, & Social Sciences Division

East Campus,
Founders Hall, 162
(209) 575-6129

SUPPORT STAFF
Haley Radovich, Admin. Secretary
Mandy Landis, Secretary III

INSTRUCTIONAL SUPPORT STAFF
Penny Belus, Lab. Asst. II
Andrea Porter, Lab Asst. I
Julie Bakus, Inst. Asst. II
Todd Mathias, Inst. Asst. I
Lattha Souvannaseng, Inst. Asst. I
Sampao Murphy, Inst. Asst. I
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Chris Groth
Joel Hagen
Gret Hausmann
Richard Higginbotham
Dale Hoagland
Cecelia Hudelson-Putnam
Bobby Hutchison
Kimberly Kromdahl
Linda Kropp
Rose LaMont
Brian Larson
Curtis Martin
James McGarry, PhD.
Lee Merchant
Steven Miller, PhD.
Nancy Sill

Awards Conferred in:
Accounting, AS, AA, C
Accounting Clerk, C
Bookkeeping, AS, AA, C
Business Administration, AS, AA
Business Operations, AS, AA, C
Clerical, AS, AA, C
Computer Applications Specialist, C
Computer Graphics Applications, AS, C
Computer Information Systems, AA, C
Computer Programming Specialist, C
Computer Science, AS, AA
International Business, C

Marketing, AS, AA
Network Administration, C
Network Technician, C
Office Administration, AS, AA, C
Office Computer Applications, C
Office Support, C
Professional Selling, C
Records Management/Data Entry Specialist, C
Real Estate, AS, AA, C
Retail Management, SR
Supervisory Management, AS, AA, C
Word Processing, C

PROGRAMS IN BUSINESS

Accounting

The Accounting program is an intensive study of accounting theory as it applies to business and industry today. Accounting is a vital element of business. Accountants record the way business has grown and, after analyzing the figures, recommend its future direction. Beginning courses concentrate on recording, classifying, and reporting financial information resulting from business transactions. The student then learns the financial structure of business and analysis of financial information for management decision making. Double entry accounting, ledger and journal techniques and accounting cycles are emphasized. The use of computers in accounting is also an integral part of the program. Accounting courses are taught during the day and evening to allow students who work the opportunity to attend classes.

Certificate of Achievement: Accounting

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 18 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 204</td>
<td>Spreadsheet Skills for Financial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUSAD 136</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>Machine Calculation</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.......................... 14½
CMpsc 202 [NP] Business Information Systems ............................................................. 3
BUSAD 377 [NP] Human Relations in Business ............................................................ 3
BUSAD 230 [NP] Personal Finance ............................................................................. 3
MATH 50 [NP] Business Math .................................................................................... 3
BUSAD 319 [NP] Payroll Accounting ......................................................................... 3
BUSAD 218 [NP] Business Law .................................................................................. 4

Student may complete whichever course was not used in the REQUIRED units.

BUSAD 204 [NP] Cost Accounting ............................................................................. 3 OR
BUSAD 336 [NP] Tax Accounting .............................................................................. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .............................................. 24

A.A. Degree: Accounting

To earn an Associate in Arts Degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework.

REQUIRED COURSES - COMPLETE 20 UNITS

BUSAD 201 [1] Financial Accounting ................................................................. 4
BUSAD 202 [2] Managerial Accounting ............................................................... 4
BUSAD 203 [3] Computer Accounting ................................................................. 3

TOTAL UNITS FOR A.A. MAJOR ............................................................................... 20

A.S. Degree: Accounting

To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to the coursework below.

REQUIRED COURSES - COMPLETE 20 UNITS

BUSAD 201 [1] Financial Accounting ................................................................. 4
BUSAD 202 [2] Managerial Accounting ............................................................... 4
BUSAD 203 [3] Computer Accounting ................................................................. 3

ELECTIVE COURSES - COMPLETE 10 UNITS

BUSAD 319 [3] Payroll Accounting ................................................................. 3
BUSAD 204 [3] Cost Accounting ......................................................................... 3
BUSAD 274 [3] Human Resources Management .................................................. 3 OR
BUSAD 100 [1] Success in Business ................................................................. 1½

TOTAL UNITS FOR A.S. MAJOR .............................................................................. 30

Certificate of Achievement: Bookkeeping

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 19 UNITS

MATH 50 [NP] Business Math ............................................................................... 3
BUSAD 310 [NP] Bookkeeping 1 ........................................................................ 3
BUSAD 320 [NP] Bookkeeping 2 ........................................................................ 3
BUSAD 203 [NP] Computer Accounting ............................................................. 3
BUSAD 319 [NP] Payroll Accounting ................................................................ 3
BUSAD 300 [NP] Machine Calculation ............................................................... 2
BUSAD 200 [NP] Spreadsheet Skills for Financial Accounting ..................... 2

ELECTIVE COURSES - COMPLETE 6 UNITS

CMpsc 202 [NP] Business Information Systems .................................................. 3
BUSAD 248 [NP] Introduction to Business ......................................................... 3
BUSAD 259 [NP] Small Business Management .................................................... 3
ORADM 203 [NP] Intermediate Keyboarding ....................................................... 3
ORADM 305 [NP] Records Management ............................................................... 3
BUSAD 377 [NP] Human Relations in Business .................................................. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 25

The Bookkeeping Certificate is designed for students planning to enter the job market at the entry level as a bookkeeper/accounting clerk after completing the required program courses here at Modesto Junior College. Students should have keyboarding skills. If not, he/she should take a beginning keyboarding course.

In the Bookkeeping A.A./A.S. Degree program at Modesto Junior College, students learn to analyze and enter transactions in journals, post to ledgers, complete worksheets, prepare the company's payroll, calculate employer payroll taxes, prepare the federal and state payroll tax forms, use various bookkeeping registers, prepare adjusting and closing entries, prepare classified earnings and capital statements, and prepare balance sheets. Students also learn about depreciation, bad debts, cost of goods sold, notes receivable, notes payable, inventory valuation and business taxes. The use of computers is also an important part of the bookkeeping program.
### A.A. Degree: Bookkeeping

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 19 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 310</td>
<td>Bookkeeping 1</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 320</td>
<td>Bookkeeping 2</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>Machine Calculation</td>
<td>2</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>Spreadsheet Skills for Financial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 377</td>
<td>Human Relations in Business</td>
<td>3 OR</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR A.A. MAJOR** .......................................................... 22

### A.S. Degree: Bookkeeping

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 19 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 310</td>
<td>Bookkeeping 1</td>
<td>3</td>
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<tr>
<td>BUSAD 320</td>
<td>Bookkeeping 2</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>Machine Calculation</td>
<td>2</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Business Math</td>
<td>3</td>
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<td>BUSAD 200</td>
<td>Spreadsheet Skills for Financial Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 377</td>
<td>Human Relations in Business</td>
<td>3 OR</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**ADDITIONAL ELECTIVE COURSES - COMPLETE 8 UNITS**

*Any courses in Business Administration, Computer Science, or Office Administration*

**TOTAL UNITS FOR A.S. MAJOR** .......................................................... 30

### Business Administration PROGRAM

This curriculum plan is intended for those interested in transferring to a four-year college or university. Students are encouraged to consult with the business staff or counselor in order to modify the curriculum to reflect their career interests and the career goals of the major. Students who plan to pursue a Business Administration major at a four-year institution should check the catalog of the senior school for specific requirements. Visit www.assist.org for specific transfer information.

The Business Administration program is designed to prepare students who plan to transfer to a four-year college or university to earn a Bachelor in Arts or Science Degree. Students take classes to complete general education requirements and combine business classes in accounting, computer science, marketing, and business law to complete the Business Administration program. Upon transferring to a four-year college or university, students may choose a concentration in areas such as accounting, business teacher education, executive secretarial administration, finance, insurance, international business, management information, marketing, production operations and systems management, and real estate and land use affairs.

### A.A. Degree: Business Administration

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. It is suggested that the student who plans to transfer follow the University Preparation Pathway.

#### REQUIRED COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>4</td>
</tr>
<tr>
<td>CMPS 202</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 5 UNITS

*Any courses in Office Administration, Business Administration, or Computer Graphics Applications, Computer Science, Real Estate and Economics (ECON 101 and 102 only)*

**TOTAL UNITS FOR A.A. MAJOR** .......................................................... 20

### A.S. Degree: Business Administration

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. It is suggested that the student who plans to transfer follow the University Preparation Pathway. To earn an Associate in Science Degree, students must complete the 15 Required Units for the Associate Degree, plus 15 units of coursework from Office Administration, Business Administration, Real Estate, Economics, or Computer Science. 4 units of vocational work experience will be accepted for the A.S. Degree as part of the 30-unit major requirement; none will be accepted for the A.A. Degree.

**TOTAL UNITS FOR A.S. MAJOR** .......................................................... 30
Business Operations
PROGRAM

The Business Operations major is designed for those students seeking an A.A./A.S. degree in management and/or marketing activities of organizations. The major offers two separate tracks for those students wishing to specialize in either area.

The Management track in Business Operations will prepare students for careers in both profit and nonprofit organizations. The basic functions of management are applied in organizations of all sizes and types. These functions include planning, organization, directing, and controlling. Students will learn the theory and techniques of problem solving, communication, motivation, and quality performance.

A.A. Degree:

Business Operations: Management

• To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

BUSAD 240 [1] Principles of Management .................................................. 3
BUSAD 210 [3] Business Communications .................................................... 3 OR

UNITS IN A.A. MAJOR ................................................................................ 20

A.S. Degree:

Business Operations: Management

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the Required units for A.A. Degree, in addition to the following coursework.

ELECTIVE COURSES - COMPLETE 10 UNITS

Any courses in Business Administration, Computer Science, or Office Administration

UNITS IN A.S. MAJOR ............................................................................... 30

Clerical
PROGRAM

The Clerical A.A./A.S. Degree/Certificate programs are designed to prepare students for various types of office occupations in the clerical field. Clerical training involves the study of various procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of basic skills necessary for success in those positions. Students learn keyboarding, records management, human relations, business communication, and math.

Career possibilities in the clerical field are numerous. Jobs exist in governmental agencies, schools, health facilities, stores, and in private businesses. Some of the career alternatives for clerical graduates are record keeper, file clerk, general office clerk, mail clerk, inventory clerk, receptionist, and word processor.

Certificate of Achievement: Clerical

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 30 UNITS

BUSAD 310 [2] Bookkeeping ................................................................. 3
OFADM 202 [1] Intermediate Keyboarding ............................................. 2
OFADM 303 [1] Keyboarding for Speed & Accuracy (twice at ½ unit) .... 1
OFADM 304 [2] Professional English for Business ......................... 3
OFADM 305 [3] Records Management ............................................... 3
OFADM 313 [1] Office Skills ............................................................... 3
OFADM 353 [2] Introduction to Computers and Windows ................. 1
OFADM 359 [3] Introduction to Spreadsheet Software ..................... 1
OFADM 362 [1] Introduction to Business Presentation Software .......... 1
OFADM 363 [1] Understanding the Internet ....................................... 1
OFADM 366 [2] Proofreading Techniques ............................................ 1
OFADM 375 [4] 10-Key on the Computer ............................................. 1

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 30

A.A. Degree: Clerical

• To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

OFADM 202 [1] Intermediate Keyboarding ............................................. 2
OFADM 304 [2] Professional English for Business ............................ 3
OFADM 305 [3] Records Management ............................................... 3
OFADM 313 [1] Office Skills ............................................................... 3
OFADM 353 [2] Introduction to Computers and Windows ................. 1
OFADM 359 [3] Introduction to Spreadsheet Software ..................... 1
OFADM 375 [4] 10-Key on the Computer ............................................. 1

UNITS IN A.A. MAJOR ............................................................................... 20
A.S. Degree: Clerical

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) in addition to the 20 Required Units for A.A. Degree, plus 10 Elective Units from the Elective Courses below, and complete the MJC Associate Degree Requirements. Student should consult with a Clerical advisor for selection of Elective Units.

**ELECTIVE COURSES - COMPLETE 10 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 232</td>
<td>Advanced Word Processing &amp; Desktop Pub</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 303</td>
<td>Keyboarding for Speed &amp; Accuracy</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 312</td>
<td>Alphabetic Notetaking</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 330</td>
<td>Beginning Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 362</td>
<td>Introduction to Business Presentation Software</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>Understanding the Internet</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 366</td>
<td>Proofreading Techniques</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>Machine Calculation</td>
<td>2</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>Bookkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 379</td>
<td>Customer Relations</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 380</td>
<td>Customer Service</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS IN A.S. MAJOR: 30

---

**Certificate of Achievement:**

**Computer Graphics Applications**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 34 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121</td>
<td>Basic Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 124</td>
<td>Color and Design</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 213</td>
<td>Applied Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>Introduction to Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>Business Presentation Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 217</td>
<td>Computer Illustration</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 219</td>
<td>Computer Graphics Portfolio Review</td>
<td>1</td>
</tr>
<tr>
<td>CMPGR 225</td>
<td>3D Modeling and Animation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 235</td>
<td>Image Manipulation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 263</td>
<td>Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>Publishing on the World Wide Web</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 268</td>
<td>Desktop Video Animation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 5 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 160</td>
<td>Appreciation of Art</td>
<td>3</td>
</tr>
<tr>
<td>ART 170</td>
<td>Basic Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 181</td>
<td>Basic Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 182</td>
<td>Basic Photography</td>
<td>3</td>
</tr>
<tr>
<td>CGR 201</td>
<td>Graphic Arts Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CGR 211</td>
<td>Typography 1 (PageMaker and Quarkxpress)</td>
<td>2</td>
</tr>
<tr>
<td>CGR 224</td>
<td>Electronic Publishing</td>
<td>2</td>
</tr>
<tr>
<td>ART 123</td>
<td>Figure Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 315</td>
<td>Introduction to Media Systems</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 310</td>
<td>Introduction to C.A.D</td>
<td>1</td>
</tr>
<tr>
<td>CMPGR 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 236</td>
<td>Advanced Photoshop Applications</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 262</td>
<td>Exploring the World Wide Web</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 263</td>
<td>Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>Publishing on the World Wide Web</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 265</td>
<td>Multimedia on the World Wide Web</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 267</td>
<td>Dreamweaver in Website Design</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 268</td>
<td>Flash: Web Graphics and Animation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 269</td>
<td>Flash: Web Graphics and Animation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 285A,B</td>
<td>Special Projects</td>
<td>1</td>
</tr>
<tr>
<td>CMPGR 287</td>
<td>Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 290A,B</td>
<td>Special Topics (with approval)</td>
<td>2</td>
</tr>
<tr>
<td>RAVV 114</td>
<td>Television Studio Operations</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 110</td>
<td>Descriptive Drawing</td>
<td>1</td>
</tr>
<tr>
<td>CMPSC 267</td>
<td>Microsoft Windows - Advanced</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR CERTIFICATE: 39

* Not required for A.S. Degree
A.S. Degree: Computer Graphics Applications

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of Required and Elective courses for certificate, with the exception of CMPGR 219.

TOTAL UNITS REQUIRED IN AS MAJOR ........................................................ 39

Computer Information Systems PROGRAM

The Business Computer Information Systems program is designed for students who plan to specialize in business computer applications at a four-year college. Students who wish to declare this transfer major should ask for program planning assistance from a business program advisor. Transfer institutions vary in lower division (first two years of college) major department requirements. Meeting the Modesto Junior College Associate Degree major requirements does not necessarily mean a given transfer institution's major requirements have been met.

A.A. Degree:

Computer Information Systems

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Students are urged to meet with a Computer Science faculty advisor to assist them plan their specific program for graduation.

REQUIRED COURSES – COMPLETE 21 UNITS

BUSAD 201 [1] Financial Accounting .................................................................... 4
BUSAD 202 [2] Managerial Accounting ................................................................ 4
CMPSC 220 [2] SQL Server Administration ............................................................ 3

TOTAL UNITS FOR A.A. MAJOR ................................................................... 21

Certificate of Achievement:

Computer Programming Specialist

This skills recognition will prepare students to work as an entry level programmer in the areas of JAVA programming, C++ programming, or Visual BASIC programming.

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 13 UNITS

CMPSC 204 [1] Introduction to Programming ....................................................... 3
CMPSC 205 [2] Problem Solving and Programming 1 .............................................. 3
CMPSC 206 [2] UNIX/Linux OS ......................................................................... 3
CMPGR 262 [1] Exploring the Internet ................................................................. 1

ELECTIVE COURSES – COMPLETE 3 UNITS


TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................. 16

Programs in Business
Computer Science

A.S. Degree: Computer Science

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 77) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Students are urged to meet with a Computer Science faculty advisor to assist them plan their specific program for graduation.

RECOMMENDED PREPARATION - (NOT PART OF MAJOR)

OFADM 301  [1]  Beginning Keyboarding ................................................................. 1½ OR Equivalent Keyboarding Skills

REQUIRED COURSES - COMPLETE 13 UNITS

CMPS 205  [2]  Problem Solving and Programming 1 ............................................ 3
MATH 122  [1]  Functions and Analytical Geometry (Higher Math) ..................... 4 OR (4)

ELECTIVE COURSES - COMPLETE 3-4 UNITS

CMPS 213  [NP]  Programming with Visual Basic ................................................. 3
MATH 144  [NP]  Applied FORTRAN .................................................................. 3
MATH 173  [NP]  Calculus: Third Course ............................................................... 4
MATH 134  [NP]  Elementary Statistics ................................................................. 3
PHYS 102  [NP]  General Physics ........................................................................ 4
MATH 174  [NP]  Introduction to Linear Algebra and Ordinary Differential Equations 4

ADDITIONAL ELECTIVE COURSES - COMPLETE 3-4 UNITS

Any course in Business Administration, Computer Science, or Office Administration

TOTAL UNITS FOR A.A. MAJOR ........................................................................... 20

A.A. Degree: Computer Science

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Students are urged to meet with a Computer Science faculty advisor to assist them plan their specific program for graduation.

IMPORTANT: This program is intended to be a Transfer Program guide only. Associate Degree Requirements, general education patterns, and junior standing requirements are subject to change. It is the student's responsibility to consult the catalog for the targeted college/university. Students may consult a business division advisor for a sample four-semester plan and more detailed program-planning guidance.

RECOMMENDED PREPARATION - (NOT PART OF MAJOR)

OFADM 301  [1]  Beginning Keyboarding ................................................................. 1½ OR Equivalent Keyboarding Skills

REQUIRED COURSES - COMPLETE 13 UNITS

CMPS 205  [2]  Problem Solving and Programming 1 ............................................ 3
MATH 122  [1]  Functions and Analytical Geometry (Higher Math) ..................... 4 OR (4)

ELECTIVE COURSES - COMPLETE 3-4 UNITS

CMPS 213  [NP]  Programming with Visual Basic ................................................. 3
MATH 144  [NP]  Applied FORTRAN .................................................................. 3
MATH 173  [NP]  Calculus: Third Course ............................................................... 4
MATH 134  [NP]  Elementary Statistics ................................................................. 3
PHYS 102  [NP]  General Physics ........................................................................ 4
MATH 174  [NP]  Introduction to Linear Algebra and Ordinary Differential Equations 4

ADDITIONAL ELECTIVE COURSES - COMPLETE 3-4 UNITS

Any course in Business Administration, Computer Science, or Office Administration

TOTAL UNITS FOR A.A. MAJOR ........................................................................... 20

IMPORTANT: This program is intended to be a Transfer Program guide only. Associate Degree Requirements, general education patterns, and junior standing requirements are subject to change. It is the student's responsibility to consult the catalog for the targeted college/university. Students may consult a business division advisor for a sample four-semester plan and more detailed program-planning guidance.
International Business PROGRAM

The International Business Skills Recognition award is designed for those students seeking an entrepreneurial or organizational career in global commerce. It may be obtained as an individual certificate or incorporated into other appropriate majors. Courses are designed to provide an essential understanding of both domestic and international business practices. Economic and cultural considerations are addressed in relation to business of all sizes and types.

Certificate of Achievement: International Business

- To earn a Skills Recognition Award, the student must complete the coursework as indicated below. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 17 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 208</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 209</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 202</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 17

Marketing PROGRAM

The Marketing program is designed for those students interested in activities relating to the presentation, purchase, and distribution of goods and services in profit and nonprofit organizations. Students will learn the central role that marketing plays in organizations of every size and type, public and private.

A.A. Degree: Marketing

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 245</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 358</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 259</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 299A,B</td>
<td>1-2</td>
</tr>
<tr>
<td>CMPSC 201</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR MAJOR: 20

A.S. Degree: Marketing

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the required units for A.A. Degree, in addition to the following coursework.

ELECTIVE COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 310</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>2</td>
</tr>
</tbody>
</table>

ANY 4-5 UNITS OF COURSEWORK IN BUSAD, ORADM OR CMPSC

TOTAL UNITS IN A.S. MAJOR: 30
Network Administration

PROGRAM

This certificate is designed for students seeking entry-level positions in computer network administration, designing networks, installing server and client operating systems, configuring network services, and implementing network security.

Note: All of these courses are also preparation for Microsoft certification as a Microsoft Certified Professional (MCP) in the individual subject. A student who has completed the Network Administration Certificate would be eligible to complete the Microsoft Certified Systems Engineer (MCSE) certification with the completion of just one additional course from the options list.

Certificate of Achievement:
Computer Network Administration

- To earn a certificate of achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPS 206</td>
<td>3</td>
<td>UNIX/Linux OS</td>
</tr>
<tr>
<td>CMPS 220</td>
<td>3</td>
<td>SQL Server Administration</td>
</tr>
<tr>
<td>CMPS 264</td>
<td>3</td>
<td>Windows Server OS</td>
</tr>
<tr>
<td>CMPS 281</td>
<td>3</td>
<td>Advanced Networking and Security</td>
</tr>
<tr>
<td>CMPS 289</td>
<td>3</td>
<td>Directory Services</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 15

Office Administration

PROGRAM

The Office Administration A.A./A.S. Degree/Certificate Program is designed to prepare students for occupations in the office administration field. Some career possibilities are administrative assistant, executive secretary, office manager, office supervisor, and transcriptionist. Office administration involves the study of office procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of skills necessary for success in these positions. Students learn keyboarding, word processing, records management, human relations, business communication, and math. Word processing, letter composition, and office administration procedures are emphasized to prepare students for the assumption of responsible positions.

Certificate of Achievement:
Office Administration

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 32 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 202</td>
<td>2</td>
<td>Intermediate Keyboarding</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>2</td>
<td>Intermediate Word Processing</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>3</td>
<td>Business Proofreading and Editing</td>
</tr>
<tr>
<td>OFADM 314</td>
<td>3</td>
<td>Office Procedures and Technologies</td>
</tr>
<tr>
<td>OFADM 315</td>
<td>2</td>
<td>Today's Office</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>2</td>
<td>Introduction to Spreadsheet Software</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>2</td>
<td>Introduction to Databases</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>1</td>
<td>Understanding the Internet</td>
</tr>
<tr>
<td>OFADM 320</td>
<td>1</td>
<td>Telephone Techniques</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>2</td>
<td>Business Communication</td>
</tr>
<tr>
<td>OFADM 232</td>
<td>2</td>
<td>Advanced Word Processing &amp; Desktop Pub</td>
</tr>
<tr>
<td>OFADM 328B</td>
<td>2</td>
<td>Machine Transcription</td>
</tr>
<tr>
<td>OFADM 375</td>
<td>2</td>
<td>10-Key on the Computer</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>2</td>
<td>Business Presentation Graphics</td>
</tr>
<tr>
<td>MATH 50</td>
<td>1</td>
<td>Business Math</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 32

A.A. Degree: Office Administration

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 202</td>
<td>2</td>
<td>Intermediate Keyboarding</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>2</td>
<td>Intermediate Word Processing</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>1</td>
<td>Telephone Techniques</td>
</tr>
<tr>
<td>OFADM 320</td>
<td>3</td>
<td>Business Proofreading and Editing</td>
</tr>
<tr>
<td>OFADM 314</td>
<td>3</td>
<td>Office Procedures and Technologies</td>
</tr>
<tr>
<td>OFADM 315</td>
<td>2</td>
<td>Today's Office</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>1</td>
<td>Introduction to Spreadsheet Software</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>1</td>
<td>Introduction to Databases</td>
</tr>
<tr>
<td>OFADM 362</td>
<td>1</td>
<td>Introduction to Business Presentation Software</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>4</td>
<td>Business Communication</td>
</tr>
</tbody>
</table>

UNITS IN A.A. MAJOR ................................................................. 20
A.S. Degree: **Office Administration**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p. 69) which include completion of the 10 required courses for AA Degree, the 10 Elective units belows. Student should consult with an Office Administration advisor for selection of Elective Units.

**ELECTIVE COURSES - COMPLETE 10 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 232</td>
<td>Advanced Computer &amp; Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>Introduction to Spreadsheets</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 362</td>
<td>Introduction to Business Presentation Software</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 355</td>
<td>10-Key on the Computer</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 328A,B</td>
<td>Machine Transcription</td>
<td>1,2</td>
</tr>
<tr>
<td>OFADM 330</td>
<td>Professional English for Business</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 305</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 312</td>
<td>1½ Elective units</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 304</td>
<td>Machine Transcription</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 201</td>
<td>Advanced Computer &amp; Desktop Publishing</td>
<td>3</td>
</tr>
</tbody>
</table>

**UNITS IN A.S. MAJOR** ................................................................. 30

---

**Office Support**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 17 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 304</td>
<td>Professional English for Business</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 305</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 312</td>
<td>Alphabetic Notetaking</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 320</td>
<td>Telephone Techniques</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 330</td>
<td>Beginning Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>Introduction to Spreadsheets</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>Introduction to Databases</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 362</td>
<td>Introduction to Business Presentation Software</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................... 17

---

**Office Computer Applications**

The Office Computer Applications Certificate of Achievement will be given for occupational preparation and/or career supplementation and/or career upgrade. These courses will help students meet the “computer” requirements needed for today’s office worker: keyboarding, advanced document preparation including mail merge and linking/embedding documents, spreadsheet design and analysis, computer presentation design, information management utilizing a database, and the Windows operating system.

**Certificate of Achievement:** **Office Computer Applications**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 17 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 202</td>
<td>Intermediate Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 330</td>
<td>Beginning Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 278</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>Introduction to Databases</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 362</td>
<td>Introduction to Business Presentation Software</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 353</td>
<td>Introduction to Windows</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................... 17

---

**Program in Business**

- **Programs in Business**

  - **Office Support**

    The Office Support Certificate of Achievement is designed for students desiring to meet entry-level qualifications for office support positions which require keyboarding, telephone techniques, business document formatting, document organization, time management, word processing skills, Internet and e-mail protocol, and spreadsheet design.

  - **Certificate of Achievement: Office Support**

    - To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

    **REQUIRED COURSES - COMPLETE 17 UNITS**

    | Course Code | Course Name                                      | Units |
    |-------------|--------------------------------------------------|-------|
    | OFADM 301  | Beginning Keyboarding                             | 1½    |
    | OFADM 302  | Beginning Document Processing                     | 1½    |
    | OFADM 304  | Professional English for Business                 | 3     |
    | OFADM 305  | Records Management                                | 3     |
    | OFADM 312  | Alphabetic Notetaking                             | 2     |
    | OFADM 320  | Telephone Techniques                              | 1     |
    | OFADM 330  | Beginning Word Processing                         | 3     |
    | OFADM 359  | Introduction to Spreadsheets                      | 1     |
    | OFADM 363  | Introduction to the Internet                      | 1     |
# Professional Selling

**PROGRAM**

The Professional Selling Certificate program concerns itself with the activities that take place in the sale and distribution of goods and services in a world economy. It includes such areas as creative selling, marketing, and business communication. Professional Selling is an important part of the marketing process. The salesperson must be able to interpret product and service features in terms of benefits and advantages to the consumer, and then persuade the buyer to select that product or service. In the Professional Selling Program, the student is trained for entry-level jobs in sales.

**Certificate of Achievement:**

### Professional Selling

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

#### REQUIRED COURSES - COMPLETE 27 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 210</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 377</td>
<td>Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3 OR</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 50</td>
<td>Basic Composition and Reading</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4 OR</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>Bookkeeping 1</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 259</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 358</td>
<td>Sales and Ad Promotion</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ADDITIONAL ELECTIVE COURSES - COMPLETE 3 UNITS

Any courses in Business Administration, Computer Science, or Office Administration

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 30

---

# Real Estate

**PROGRAM**

The Real Estate A.A./A.S. Degree/Certificate program is designed to provide the skills necessary for salespersons and other workers in the real estate field. Courses cover principles and practices of real estate, financing economics, legal aspects of real estate appraisal, and escrow. The courses fulfill the state requirements for the salesperson and/or brokers license. Students may qualify for entry level jobs in the real estate field. Classes are also designed to upgrade the skills of persons who already work in the real estate or escrow field.

**Certificate of Achievement:** **Real Estate**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

#### REQUIRED COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLES 380</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RLES 381</td>
<td>Real Estate Practices</td>
<td>3</td>
</tr>
<tr>
<td>RLES 384</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RLES 385</td>
<td>Real Estate Appraisal/Residential</td>
<td>3</td>
</tr>
<tr>
<td>RLES 392</td>
<td>Basic Escrow Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES COMPLETE 6-8 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLES 382</td>
<td>Legal Aspects of Real Estate</td>
<td>OR</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>3-4</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete 3-5 units to meet 26 unit requirement

Courses in Business Administration, Economics, Psychology, or Speech...

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 26

---

**A.A. Degree: Real Estate**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLES 380</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RLES 381</td>
<td>Real Estate Practices</td>
<td>3</td>
</tr>
<tr>
<td>RLES 382</td>
<td>Legal Aspects of Real Estate 1</td>
<td>3</td>
</tr>
<tr>
<td>RLES 384</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>4</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR** .............................................................................. 20

---

**A.S. Degree: Real Estate**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the 20 Required Units, 10 business Elective Units. Student should consult with a Real Estate advisor for selection of Elective Units.

#### REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLES 380</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RLES 381</td>
<td>Real Estate Practices</td>
<td>3</td>
</tr>
<tr>
<td>RLES 382</td>
<td>Legal Aspects of Real Estate 1</td>
<td>3</td>
</tr>
<tr>
<td>RLES 384</td>
<td>Real Estate Finance</td>
<td>3</td>
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<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>4</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 10 UNITS (SEE ABOVE.)

**UNITS IN A.S. MAJOR** .............................................................................. 30
Records Management

PROGRAM

The Records Management/Data Entry Specialist Certificate of Achievement is designed for students desiring to meet entry-level requirements for records management and data entry employees: keyboarding, filing rules and their applications, manual and computer filing system development, telephone techniques, time management skills, ten-key data entry and math calculations.

Certificate of Achievement: Records Management/Data Entry Specialist

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 16 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1½</td>
</tr>
<tr>
<td>OFADM 304</td>
<td>Professional English for Business</td>
<td></td>
</tr>
<tr>
<td>OFADM 305</td>
<td>Records Management</td>
<td></td>
</tr>
<tr>
<td>OFADM 313</td>
<td>Office Skills</td>
<td></td>
</tr>
<tr>
<td>OFADM 375</td>
<td>10-Key on the Computer</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>Machine Calculations</td>
<td></td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 16

Retail Management

PROGRAM

The Retail Management Certificate Program is designed for individuals who are interested in or are currently employed in the retail industry and seek advancement into a managerial position in that field. Course work includes: retail store management, information systems, business mathematics, workplace writing, accounting, human resource management, marketing and business communications. Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All certificate Required Courses must be passed with a "C" grade or better. Interested students should consult division advisors.

Certificate of Achievement: Retail Management (WAFC)

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 30 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 50</td>
<td>Business Math</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 50</td>
<td>Basic Composition and Reading</td>
<td>3 OR</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 202</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPCOM 101</td>
<td>Basic Voice and Articulation</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPCOM 102</td>
<td>Introduction to Human Communication</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPCOM 106</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>Elements of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>Bookkeeping 1</td>
<td>3 OR</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 246</td>
<td>Store Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 377</td>
<td>Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 274</td>
<td>Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>Business Communication</td>
<td>3 OR</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>Business Proofreading and Editing</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 30
Supervisory Management

PROGRAM

The Supervisory Management Program is designed to prepare students for leadership responsibilities at the operating level in business, industry, and government. It also provides owners, managers, and other supervisory personnel with the opportunity to complete specific courses designed to develop management ability. Many of the courses are offered in the evening to accommodate working students who are interested in upgrading their skills.

Certificate of Achievement:

Supervisory Management

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPR 106</td>
<td>1</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>1</td>
<td>Elements of Supervision</td>
</tr>
<tr>
<td>BUSAD 274</td>
<td>3</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>SUPR 364</td>
<td>2</td>
<td>Total Quality Management</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 9 UNITS

Any courses offered by Modesto Junior College. Student may choose to pursue a single discipline, however, it is not required.

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 21

A.A. Degree: Supervisory Management

• To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPR 106</td>
<td>1</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>1</td>
<td>Elements of Supervision</td>
</tr>
<tr>
<td>BUSAD 274</td>
<td>3</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>SUPR 364</td>
<td>2</td>
<td>Total Quality Management</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 9 UNITS

Any courses offered by Modesto Junior College. Student may choose to pursue a single discipline, however, it is not required.

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 21

A.S. Degree: Supervisory Management

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. Student should consult with a Supervisory Management advisor for selection of Elective Units.

REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPR 106</td>
<td>1</td>
<td>Organizational Communication</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>1</td>
<td>Elements of Supervision</td>
</tr>
<tr>
<td>BUSAD 274</td>
<td>3</td>
<td>Human Resources Management</td>
</tr>
<tr>
<td>SUPR 364</td>
<td>2</td>
<td>Total Quality Management</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 9 UNITS

Any courses offered by Modesto Junior College. Student may choose to pursue a single discipline, however, it is not required.

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 32

Note: Not all courses are offered every semester, therefore, students should see an advisor for appropriate course sequence.

PROGRAMS IN BUSINESS

Word Processing

PROGRAM

The Word Processing Certificate program is designed to teach students word processing skills and concepts. Students acquire the necessary competencies for the modern office. Word processing and Desktop publishing has become one of the fastest growing careers during the past decade. There are a wide variety of employment opportunities available.

Certificate of Achievement:

Word Processing

• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 23 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 303</td>
<td>NP</td>
<td>Keyboarding for Speed &amp; Accuracy (twice at ½ unit)</td>
</tr>
<tr>
<td>OFADM 203</td>
<td>1</td>
<td>Intermediate Keyboarding</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>1</td>
<td>Intermediate Word Processing</td>
</tr>
<tr>
<td>OFADM 232</td>
<td>2</td>
<td>Advanced Word Processing &amp; Desktop Pub</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>1</td>
<td>Business Proofreading and Editing</td>
</tr>
<tr>
<td>OFADM 334</td>
<td>2</td>
<td>Office Procedures and Technologies</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>1</td>
<td>Introduction to Spreadsheet Software</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>2</td>
<td>Introduction to Databases</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>1</td>
<td>Understanding the Internet</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>2</td>
<td>Business Communication</td>
</tr>
<tr>
<td>CMGR 215</td>
<td>2</td>
<td>Business Presentation Graphics</td>
</tr>
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</table>

ELECTIVE COURSES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMGR 214</td>
<td>NP</td>
<td>Digital Capture for Computer Graphics</td>
</tr>
<tr>
<td>CMGR 217</td>
<td>NP</td>
<td>Computer Illustration Software</td>
</tr>
<tr>
<td>CMGR 235</td>
<td>NP</td>
<td>Image Manipulation Software</td>
</tr>
<tr>
<td>CMGR 264</td>
<td>NP</td>
<td>Publishing on the World Wide Web</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 32
Child Development PROGRAM

The Child Development program offers both theoretical and practical courses which focus on the growth and development of children from conception to late adolescence. Students use this knowledge to effectively guide children by creating nurturing learning and care environments, and by responding to the needs of children, families, staff, agencies, and the larger community. Training prepares students for a wide variety of careers in direct services for children and support services for families in licensed, state, and federal programs serving infants, children, and adolescents.

Required coursework in the Child Development program emphasizes educational ladders leading to certificates, the Associate of Arts degree or the Associate of Science degree, and transfer to baccalaureate programs. This coursework is designed to meet the academic requirements of the Child Development Permits, issued by the Commission on Teacher Credentialing (Title 5), the California Department of Social Services (DSS Title 22), and the Early Intervention Certificates developed in conjunction with the California Early Start Community College Personnel Preparation Project in Early Intervention. Students should be advised that for the various levels of the Child Development Permits and Early Intervention Certificates, there is an experience requirement and/or general education requirements.

All Child Development core courses for certificates, degrees, and permits must be completed with a grade of “C” or better. All required general education requirements for the Child Development Permits and Early Intervention Certificates, both issued by the State, must be completed with a grade of “C” or better.

It is recommended that first semester students select courses from the Child Development Associate Teacher Basic Skills Recognition Award. Second semester students are encouraged to select courses from the Child Development Teacher Certificate of Achievement. All students are encouraged to consult a Child Development Advisor for enrollment and program details. Advisors will assist students in the selection of proper courses and sequences.

A.A. Degree: Child Development

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the 24 required units for the program with a C or better. See Child Development Program Matrix for program requirements.

REQUIRED CLDDV UNITS .................................................................................. 24
UNITS IN A.A. MAJOR .................................................................................. 24

A.S. Degree: Child Development

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the all required courses for the program with a C or better. See Child Development Program Matrix for program requirements.

REQUIRED CLDDV UNITS .................................................................................. 26
ELECTIVE CLDDV COURSES IN ADMINISTRATION OR MASTER TEACHER ........... 6
UNITS IN A.S. MAJOR .................................................................................. 32

Certificates in Child Development

The Certificate of Achievement in Child Development act as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California’s Early Start Program, A.A./A.S. degrees, and transfer to a university. Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing. To earn a Certificate of Achievement, the student must complete the coursework as indicated. Each course must be completed with a grade of C or better.
### Skills Recognition Award: Associate Teacher

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 101</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 103</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 104</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 105</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 107</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 109</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ........................................ 12

### Certificate of Achievement: Teacher

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>CLDDV 103</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 104</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 105</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 107</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 109</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 121</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 122</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 123</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 125</td>
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</tr>
<tr>
<td>CLDDV 127</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 128</td>
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</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 24

### Certificate of Achievement: Master Teacher

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 101</td>
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</tr>
<tr>
<td>CLDDV 103</td>
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</tr>
<tr>
<td>CLDDV 104</td>
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<td>CLDDV 105</td>
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<td>CLDDV 107</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 109</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 121</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 122</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 123</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 125</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 127</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 128</td>
<td>2</td>
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</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 24

### Certificate of Achievement: Early Intervention Assistant 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 103</td>
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</tr>
<tr>
<td>CLDDV 104</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 105</td>
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<td>CLDDV 107</td>
<td>1</td>
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<td>CLDDV 109</td>
<td>1</td>
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<td>CLDDV 121</td>
<td>2</td>
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<td>2</td>
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<tr>
<td>CLDDV 125</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 127</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 24

### Certificate of Achievement: Early Intervention Assistant 2

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CLDDV 103</td>
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</tr>
<tr>
<td>CLDDV 104</td>
<td>1</td>
</tr>
<tr>
<td>CLDDV 105</td>
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<td>CLDDV 107</td>
<td>1</td>
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<td>CLDDV 109</td>
<td>1</td>
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<tr>
<td>CLDDV 121</td>
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<tr>
<td>CLDDV 125</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 127</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 32

### PLUS 6-UNIT SPECIALIZATION OPTION

As part of the MJC Certificate program, the student may choose one of the following 6-Unit options as a specialization or create a specialization. See the Child Development Program Matrix for program requirements.

- Creative Curriculum - Families and Culture
- Family Child Care - Infant/Toddler Development
- Literacy and Literature - Music
- School-Age and Paraprofessional
- Early Intervention

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 32

### Certificate of Achievement: Site Supervisor

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 101</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** .................................... 32
# Child Development Program Matrix

The Child Development program focuses on the growth and development of children from conception to late adolescence. Students use this knowledge to effectively guide children by creating nurturing learning environments, and by responding to the needs of children, families, staff, agencies, and the larger community. The Child Development program includes both theoretical and practical courses. Training prepares students for a wide variety of careers in direct services for children and support services for families. Review the matrix below to see course requirements for each academic award, any corresponding State permits, and the recommended course sequence for each award.

<table>
<thead>
<tr>
<th>Required Courses in Child Development</th>
<th>CLDDV DEGREES</th>
<th>CLDDV SKILLS RECOGNITIONS</th>
<th>CLDDV CERTIFICATES OF ACHIEVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AA Degree</td>
<td>AS Degree</td>
<td>Associate Teacher</td>
</tr>
<tr>
<td></td>
<td>103 or 104+105........[1]</td>
<td>103 or 104+105........[1]</td>
<td>103 or 104+105........[1]</td>
</tr>
<tr>
<td></td>
<td>122 or 123........[2]</td>
<td>122 or 123........[2]</td>
<td>122 or 123........[2]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLODDV Units</th>
<th>24-25</th>
<th>26-27</th>
<th>26-27</th>
<th>24-25</th>
<th>32-33</th>
<th>32-33</th>
<th>24-25</th>
<th>32-33</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Units in Option</td>
<td>12-13</td>
<td>24-25</td>
<td>26-27</td>
<td>32-33</td>
<td>24-25</td>
<td>32-33</td>
<td>24-25</td>
<td>32-33</td>
</tr>
<tr>
<td>+ Grad/Year</td>
<td>24-25</td>
<td>26-27</td>
<td>32-33</td>
<td>24-25</td>
<td>32-33</td>
<td>24-25</td>
<td>32-33</td>
<td>24-25</td>
</tr>
<tr>
<td>= TOTAL UNITS</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

## State of California Child Permit Matrix

<table>
<thead>
<tr>
<th>Permit Name</th>
<th>Associate Teacher</th>
<th>Teacher</th>
<th>Master Teacher</th>
<th>Site Supervisor</th>
<th>Early Intervention Assistant 1</th>
<th>Early Intervention Assistant 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
</tr>
<tr>
<td>60-UNIT OPTION</td>
<td>60 days at 3+ hours per day within 2 years</td>
<td>150 days at 3+ hours per day within 2 years</td>
<td>250 days at 3+ hours per day within 4 years</td>
<td>500 days at 3+ hours per day within 4 years</td>
<td>1000 days at 3+ hours per day within 4 years</td>
<td></td>
</tr>
</tbody>
</table>

*Student may design their own Major Teacher specializations; however, all specializations for a permit are subject to approval by the California Commission on Teacher Credentialing.

---

### 6-UNIT OPTIONS (required for AS Degree and Master Teacher Certificate)

- **Music**
  - Administration: 150........[2 or 3]
  - Creative Curriculum: 290........[3 or 4]
  - Early Intervention: 262........[3 or 4]
  - Families and Culture*: 282........[3 or 4]
  - Family Child Care: 282........[3 or 4]
  - Infant/Toddler: 282........[3 or 4]
  - Literacy and Language: 246........[3 or 4]
  - School-Age and Paraprofessional: 280........[3 or 4]

- **CLDDV 293 [2 or 3]**
  - Enlargement: 280........[3 or 4]
  - Creative Curriculum: 291........[3 or 4]
  - Early Intervention: 282........[3 or 4]
  - Families and Culture*: 282........[3 or 4]
  - Family Child Care: 282........[3 or 4]
  - Infant/Toddler: 282........[3 or 4]
  - Literacy and Language: 246........[3 or 4]
  - School-Age and Paraprofessional: 280........[3 or 4]

- **CLDDV 294 [3 or 4]**
  - Enlargement: 280........[3 or 4]
  - Creative Curriculum: 291........[3 or 4]
  - Early Intervention: 282........[3 or 4]
  - Families and Culture*: 282........[3 or 4]
  - Family Child Care: 282........[3 or 4]
  - Infant/Toddler: 282........[3 or 4]
  - Literacy and Language: 246........[3 or 4]
  - School-Age and Paraprofessional: 280........[3 or 4]
Culinary Arts
PROGRAM

Skills Recognition Award: CLART 301
• This Skills Recognition Award is awarded through the Culinary Arts program. Upon completion, proof of completion will be granted by the instructor.

REQUIRED COURSE - COMPLETE 14 UNITS
CLART 301 [NP] Culinary Academy 1 ................................................................. 14

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ......................... 14

Certificate of Achievement: Culinary Arts
• To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 28 UNITS
CLART 301 [NP] Culinary Academy 1 ................................................................. 14
CLART 302 [NP] Culinary Academy 2 ................................................................. 14

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................. 28

A.S. Degree: Culinary Arts

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 28 UNITS
CLART 301 (NP) Culinary Academy 1 ................................................................. 14
CLART 302 (NP) Culinary Academy 2 ................................................................. 14

ELECTIVE COURSES - COMPLETE 2 UNITS
FDNTR 219 (NP) Nutrition ................................................................................. 3
FDNTR 351 (NP) Practical Nutrition ................................................................. 3
FDSER 323 (NP) Catering .................................................................................. 2

TOTAL UNITS FOR MAJOR ........................................................................ 30

Interior Design
PROGRAM

The Interior Design program has a comprehensive curriculum based upon a nationally accepted professional body of knowledge, reflected in the skills and competencies required to become a Certified Interior Designer (C.I.D.), and included in the California Community College Program Plan for Interior Design. The application of the principles and elements of design are incorporated into every course and the content addresses the critical issues affecting the built environment: technology, universal design, and sustainability. Product knowledge, communication and presentation skills, consumer trends, and the utilization of technology are imbedded into the curriculum. Participation in professional development opportunities is encouraged.

The program focuses on the design of both residential and non-residential environments in response to the specific needs of the client, considering the factors of function, materials and structures, and aesthetics. The incorporation of professional practice issues such as ethics, licensing, and management provide a solid preparation for success in the workplace. Through the coursework, students are given the opportunity to prepare for self-employment as well as for careers in residential design, retail sales, and specialties such as kitchen and bath design. The department has an extensive resource center, professional library and computer lab. It benefits from the support of the community of professional designers, fabricators, and manufacturers’ representatives.

Additionally, the program offers an excellent opportunity for design professionals, who are currently working in the field, to update their skills and to accrue the required design-related academic units necessary to apply for the following certification examinations: NCIDQ, NKBA, CQRID and/or the IDEX exam. Please consult www.CCIDC.org for requirements to become a Certified Interior Designer (CID) in California.

• Careers in Interior Design/ Merchandising include:
  • Residential, Commercial or Institutional Design
  • Kitchen and Bath Design
  • Health Care, Retail, or Hospitality Design
  • Education
  • Product Design
  • Universal or Special Population Design
  • Historic Preservation
  • System Space Planning
  • Computer Aided Drafting
  • Specifications Writing
  • Lighting

• Professional Development and Lifelong Learning:
  • Due to the dynamic nature of interior design, students are encouraged to maintain a commitment to professional development and lifelong learning. Also, eligibility for the NCIDQ examination for certifications as a Certified Interior Designer requires a minimum of 40 semester hours that culminates in a certificate or degree.
Certificate of Achievement:

**Interior Design**

To earn a Certificate of Achievement in Interior Design, the student must complete the requirements for certificate detailed in the matrix.

**REQUIRED COURSES - COMPLETE 22 UNITS.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTDS 100</td>
<td>2</td>
<td>Careers in Design</td>
</tr>
<tr>
<td>INTDS 120</td>
<td>3</td>
<td>Color Theory and Application</td>
</tr>
<tr>
<td>INTDS 150</td>
<td>3</td>
<td>History of Interiors /Decorative Arts 1</td>
</tr>
<tr>
<td>INTDS 155</td>
<td>3</td>
<td>History of Interiors /Decorative Arts 1 🟠</td>
</tr>
<tr>
<td>INTDS 200</td>
<td>3</td>
<td>Interior Design Fundamentals</td>
</tr>
<tr>
<td>INTDS 210</td>
<td>3</td>
<td>Introduction to Sales and Marketing for Design</td>
</tr>
<tr>
<td>INTDS 215</td>
<td>3</td>
<td>Interior Design Studio 1</td>
</tr>
<tr>
<td>INTDS 220</td>
<td>3</td>
<td>Interior Finishes and Construction Materials</td>
</tr>
<tr>
<td>INTDS 230</td>
<td>3</td>
<td>Drafting for Interiors</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 5 UNITS.**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTDS 130</td>
<td>3</td>
<td>Fabrics for Interiors</td>
</tr>
<tr>
<td>INTDS 140</td>
<td>3</td>
<td>Rendering and Rapid Visualization</td>
</tr>
<tr>
<td>INTDS 145</td>
<td>3</td>
<td>Fundamentals of Lighting Design</td>
</tr>
<tr>
<td>INTDS 155</td>
<td>3</td>
<td>History of Interiors and Decorative Arts 2</td>
</tr>
<tr>
<td>INTDS 160</td>
<td>3</td>
<td>Asian Design and Decorative Arts</td>
</tr>
<tr>
<td>INTDS 180</td>
<td>3</td>
<td>Barrier-Free Design, Codes and Regulations</td>
</tr>
<tr>
<td>INTDS 190</td>
<td>3</td>
<td>Sustainable and Green Design</td>
</tr>
<tr>
<td>INTDS 235</td>
<td>3</td>
<td>Residential Space Planning</td>
</tr>
<tr>
<td>INTDS 245</td>
<td>3</td>
<td>Kitchen and Bath Design</td>
</tr>
<tr>
<td>INTDS 250</td>
<td>3</td>
<td>CAD/D for Interiors</td>
</tr>
<tr>
<td>INTDS 270</td>
<td>3</td>
<td>Business and Professional Practices</td>
</tr>
<tr>
<td>INTDS 298</td>
<td>3</td>
<td>Special Topics in Design</td>
</tr>
<tr>
<td>INTDS 299</td>
<td>3</td>
<td>Community Design Project</td>
</tr>
<tr>
<td>INTDS 398</td>
<td>3</td>
<td>Community Design Project</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.............................. 27**

**A.A. Degree: Interior Design**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of the requirements below.

**REQUIRED COURSES - Complete the 22 required units for Certificate of achievement**

**ELECTIVE COURSES - Complete 2 units from the list of electives for the Certificate of Achievement**

**UNITS IN A.A. MAJOR ................................................................. 24**

**A.S. Degree: Interior Design**

The Associate of Arts degree is appropriate for students who plan to transfer to a four-year university to earn a bachelor’s degree. Students are advised to consult with an academic counselor regarding requirements specific to various colleges and universities.

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of the requirements below.

**REQUIRED COURSES - Complete the 22 required units for Certificate of achievement**

**ELECTIVE COURSES - Complete 12 units from the list of electives for the Certificate of Achievement**

**UNITS IN A.S. MAJOR ................................................................. 34**
**Educational Programs in**

**Literature & Language Arts**

### Division Dean
(Vacant at the time of publication)
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Founders Hall, Room 275A
(209) 575-6149

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Rebecca Ramirez, Secretary III

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Jacqueline Jordan, Inst. Asst. II
Elmo Maragol, Lab Asst. II
Theresa Stevall, Lab Asst. I
Lisa Rebagliati, Lab. Asst. I

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Christopher Briggs
Ines Bucknam
Michelle Christopherson
Shelley Circle
Marcos Contreras, PhD.
Jillian Daly
Maitanne Franco, PhD.
Deborah Gilbert, PhD.
Janelle Gray
Jennifer Hamilton
Annaliese Hauser-Akpovi
Timothy Hobert
Roselle Hurst
Barbara Jensen
Dimitri Keriois
Ingrid Keriois
Ruth Luman
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Kimberly Manner, PhD.
Laura Manzo
G. Daniel Martin
Evelyn Metcalf
Jeffrey Netto, PhD.
Jenny Netto
Optimism One
Adrienne Peek
Samuel Pierstorff
Nivedita Rajagopal
Lawrence Scheg
Dorothy Scully
Michael Smedshammer, PhD.
Ann Smith
E. Denise Smith
Gabriele Steiner
Michael Strangio
Lillian Vallee, PhD.
Barbara Wells
Barbara (BJ) Wells
Theron Westrop, PhD.
Jason Wohlshadel, PhD.

### English

**PROGRAM**

For those who love to read, write, interpret, and create, majoring or minoring in English is the right choice. English courses are designed to give proficiency in skills that are highly regarded by society: the ability to read with comprehension and critical judgment, to communicate accurately and effectively both orally and in writing, to think logically, to do research and organize materials, and to interpret and appreciate literature.

The English major can lead to a career in teaching as well as in professional fields such as law, medicine, publishing, information science, and business. In addition to pre-collegiate composition courses (English 49 and English 50) and transfer-level courses (English 101, 102, and 103), the English program includes survey courses in English, American and world literature; introductory genre courses in poetry, fiction, and drama; and a number of topical courses such as Shakespeare, Bible as literature, ethnic literatures, folklore, and children's literature. The program also offers creative writing courses in poetry, fiction, and script writing. English majors choose to take survey, writing, and literature courses based upon their areas of interest, but they should include a balanced load of genre and survey courses. Many students who become English majors at four-year colleges and universities are required to take introductory survey courses in American and British literature (English 135, English 136, English 137, and English 138). However, prospective English majors and minors are strongly urged to discuss their plans with MJC counselors and English faculty advisors regarding the specific lower-division requirements at the four-year colleges and universities they plan to attend.

### A.A. Degree: English

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td></td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Advanced Composition &amp; Introduction to Literature</td>
<td></td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Advanced Composition and Critical Thinking</td>
<td></td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 11 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 105</td>
<td>Creative Writing: Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 106</td>
<td>Creative Writing: Short Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 108</td>
<td>Creative Writing: Autobiography</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 109</td>
<td>Creative Writing: Scriptwriting</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 112</td>
<td>Introduction to the Novel and Short Story</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 114</td>
<td>Introduction to Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 116</td>
<td>Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 131</td>
<td>Introduction to World Literature to 1500</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 132</td>
<td>Introduction to World Literature from 1500 to Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 135</td>
<td>American Literature: 1850</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 136</td>
<td>American Literature: 1850 to Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 137</td>
<td>Survey of English Lit to 18th Century</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 138</td>
<td>Survey of English Lit. 18th Century - Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 151</td>
<td>Introduction to Folklore</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 156</td>
<td>The Bible as Literature -- The Hebrew Canon and Intertestamental Writings</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 157</td>
<td>The Bible as Literature -- The New Testament</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 161</td>
<td>Film Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>History of Cinema</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 163</td>
<td>Introduction to Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 168</td>
<td>Adolescent Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 169</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 171</td>
<td>Introduction to African-American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 172</td>
<td>Introduction to Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 173</td>
<td>Introduction to Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 174</td>
<td>Introduction to Modern Asian Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 175</td>
<td>Introduction to Women's Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>Introduction to Mexican Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 178</td>
<td>Mass Media and the Public</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 179</td>
<td>Introduction to Native American Literature, Mythology, and the Oral Tradition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 183</td>
<td>Introduction to Tutoring Composition</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 184</td>
<td>Advanced Tutoring of Composition</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 198</td>
<td>Special Topics in English</td>
<td>3</td>
</tr>
</tbody>
</table>

#### UNITS IN A.A. MAJOR

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
</tbody>
</table>
Even though English is widely spoken in much of the world, many things are lost in translation. Learning another language opens the mind to new ideas and new ways of looking at the world. Speaking more than one language enables you to explore other people’s culture, and in turn, it helps you to understand your own. On a more practical level, speaking more than one language is a skill which will increase your marketability in today’s global market. Schools and employers tend to prefer candidates who can utilize more than one language.

Students who complete the Language Studies AA Degree will enhance their communication abilities, cultural awareness, and critical thinking skills in English as well as one or two other languages. To earn the Language Studies AA Degree, the student must complete a minimum of 20 units from the following course list in addition to the CSUGE or IGETC pattern. Prospective transfer majors should consult with a counselor to select the appropriate GE pattern.

**AA in Language Studies: Expected Outcomes**

Upon satisfactory completion of this program, you will be able to:

- Write expository and argumentative papers
- Examine the connections between culture and communication
- Synthesize ideas and develop conclusions in multiple languages
- Engage in conversation and written correspondence in multiple languages

**A.A. Degree: Language Studies**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 69) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 17 UNITS**

**COMPLETE 3 UNITS:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 103</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

**COMPLETE 14 UNITS IN ONE OR TWO LANGUAGES FROM THE FOLLOWING:**

<table>
<thead>
<tr>
<th>Language</th>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>FREN 101</td>
<td>French 1</td>
<td>5</td>
</tr>
<tr>
<td>French</td>
<td>FREN 102</td>
<td>French 2</td>
<td>5</td>
</tr>
<tr>
<td>French</td>
<td>FREN 103</td>
<td>French 3</td>
<td>5</td>
</tr>
<tr>
<td>French</td>
<td>FREN 104</td>
<td>French 4</td>
<td>5</td>
</tr>
<tr>
<td>German</td>
<td>GERM 101</td>
<td>German 1</td>
<td>5</td>
</tr>
<tr>
<td>German</td>
<td>GERM 102</td>
<td>German 2</td>
<td>5</td>
</tr>
<tr>
<td>Deaf</td>
<td>SIGN 125</td>
<td>Beginning Communication with the Deaf</td>
<td>3</td>
</tr>
<tr>
<td>Deaf</td>
<td>SIGN 126</td>
<td>Intermediate Communication with the Deaf</td>
<td>3</td>
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<tr>
<td>Spanish</td>
<td>SPAN 101</td>
<td>Spanish 1</td>
<td>5</td>
</tr>
<tr>
<td>Spanish</td>
<td>SPAN 102</td>
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<tr>
<td>Spanish</td>
<td>SPAN 104</td>
<td>Spanish 4</td>
<td>5</td>
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**ELECTIVE COURSES - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 102</td>
<td>Advanced Composition and Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 131</td>
<td>Introduction to World Literature -- To 1500</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 132</td>
<td>Introduction to World Literature -- From 1500 To Present</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 172</td>
<td>Introduction to Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 175</td>
<td>Women in Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 179</td>
<td>Intro to Native American Lit, Mythology, and Oral Tradition</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 112</td>
<td>Introduction to Chicano/a Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 173</td>
<td>Survey of Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN A.A. MAJOR**

- 20

---

**Shakespeare Academy PROGRAM**

**Skills Recognition Award: Shakespeare Academy**

- To earn a Skills Recognition Award, the student must complete the coursework that follows. Each course must be completed with a C or better.

**REQUIRED COURSES - COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 163</td>
<td>Introduction to Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>THEIR 100</td>
<td>Introduction to Theatre Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 11 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN 101</td>
<td>Introduction to the Humanities</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>Advanced Composition &amp; Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 116</td>
<td>Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 137</td>
<td>Survey of English Lit to 18th Century</td>
<td>3</td>
</tr>
<tr>
<td>THEIR 120</td>
<td>Oral Reading and Interpretation</td>
<td>3</td>
</tr>
<tr>
<td>THEIR 160</td>
<td>Fundamentals of Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEIR 161</td>
<td>Intermediate Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEIR 190B</td>
<td>Theatre Production Workshop</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD**

- 17

---

**Spanish PROGRAM**

The Department of Spanish offers various courses that provide students with the foundation for Spanish language study. Knowledge of Spanish is highly desirable in the many fields, such as health, service, business, travel and interpreting. Beyond the immediate practical advantages of learning a foreign language, there is also the profound personal enrichment that comes from first-hand knowledge of other cultures. Students majoring in Spanish have the opportunity to become acquainted with the history, literature, and art of the Spanish-speaking world. Students are urged to discuss their plans with faculty and counselors regarding the specific lower-division requirements at the four-year colleges and universities they plan to attend.

**A.A. Degree: Spanish**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**REQUIRED PREPARATORY COURSES – COMPLETE 8 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 102</td>
<td>Spanish 2</td>
<td>4 OR</td>
</tr>
<tr>
<td>SPAN 103</td>
<td>Spanish 3</td>
<td>4 OR</td>
</tr>
<tr>
<td>SPAN 104</td>
<td>Spanish 4</td>
<td>4 OR</td>
</tr>
<tr>
<td>SPAN 109</td>
<td>Spanish for Spanish Speakers 1</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 110</td>
<td>Spanish for Spanish Speakers 2</td>
<td>4</td>
</tr>
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</table>

**REQUIRED COURSES – COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 112</td>
<td>Intro. to Chicano/a Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 173</td>
<td>Survey of Latin American Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES – COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 172</td>
<td>Introduction to Chicano Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 173</td>
<td>Introduction to Latin American Literature</td>
<td>3</td>
</tr>
<tr>
<td>HIST 125</td>
<td>History of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 145</td>
<td>Latin American History</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 156</td>
<td>Mexican Culture in the United States</td>
<td>3</td>
</tr>
<tr>
<td>ANTHR 161</td>
<td>Families in Latin American Cultures</td>
<td>1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN A.A. MAJOR**

- 20
Educational Programs in Physical Education

William Kaiser, EdD, Dean
East Campus
PE Office, Room 105
(209) 575-6269

SUPPORT STAFF
Patricia Wallace, Admin.Secretary
Shamirah Pounelya, Secretary II

FACULTY
Paul Aello
Steve Aristotelous
Shawn Black
Bobby Boswell
Paul Brogan
Lori Bryhni
Eric Fischer
Michael Girardi
Milan Motroni
Cheryl Mulder
Kurt Olson
Demetras Shaer
Mary Shea
David Shrock
Jim Stevens
Sam Young

A.A. Degree: Athletic Training/Sports Medicine

• To earn a Bachelor of Science degree, students must complete the following coursework and meet the MJC Associate Degree Requirements. Courses should be selected with the assistance of an Athletic Training faculty advisor.

REQUIRED COURSES - COMPLETE 28 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 104</td>
<td>[1,3]</td>
</tr>
<tr>
<td>PE 105</td>
<td>[2,3]</td>
</tr>
<tr>
<td>PE 109</td>
<td>[2,3]</td>
</tr>
<tr>
<td>HE 110</td>
<td>[NP]</td>
</tr>
<tr>
<td>ANAT 125</td>
<td>[3]</td>
</tr>
<tr>
<td>ANAT 126</td>
<td>[3]</td>
</tr>
<tr>
<td>PHYSIO 101</td>
<td>[1]</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>[1,2]</td>
</tr>
<tr>
<td>FDTR 219</td>
<td>[1]</td>
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<tr>
<td>PSYCH 101</td>
<td>[1,2]</td>
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ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BID 101</td>
<td>[NP]</td>
</tr>
<tr>
<td>BID 111</td>
<td>[NP]</td>
</tr>
<tr>
<td>PE 141</td>
<td>[2,3,4]</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR A.A. MAJOR ............................................................ 31

Degrees and/or Certificates Offered:
Physical Education, AA
A.S. Degree: Athletic Training/Sports Medicine, AS

Instructional Programs in:
Athletics
Health Education
Dance
Recreation

Physical Education PROGRAM

A.A. Degree: Physical Education

• To earn a Bachelor of Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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<tbody>
<tr>
<td>PE 100</td>
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</tr>
<tr>
<td>PE 108</td>
<td>[2,3]</td>
</tr>
<tr>
<td>PE 109</td>
<td>[2,3,4]</td>
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<tr>
<td>PE 110</td>
<td>[1,3]</td>
</tr>
<tr>
<td>PE 115</td>
<td>[2,4]</td>
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<td>HE 101</td>
<td>[NP]</td>
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</table>

ELECTIVE COURSES - COMPLETE 5 UNITS

<table>
<thead>
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<th>Course</th>
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<tbody>
<tr>
<td>PE 101</td>
<td>[1,3]</td>
</tr>
<tr>
<td>PE 102</td>
<td>[1,3]</td>
</tr>
<tr>
<td>PE 103</td>
<td>[2,4]</td>
</tr>
<tr>
<td>PE 104</td>
<td>[1,3]</td>
</tr>
<tr>
<td>PE 105</td>
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<tr>
<td>PE 106</td>
<td>[1,3]</td>
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<tr>
<td>PE 107</td>
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<td>[3,4]</td>
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<td>PE 110</td>
<td>[1,3]</td>
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<tr>
<td>PE 113</td>
<td>[2,4]</td>
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<tr>
<td>PE 114</td>
<td>[1,3]</td>
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<tr>
<td>PE 115</td>
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<tr>
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<td>[1,3]</td>
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<tr>
<td>PE 120</td>
<td>[2,4]</td>
</tr>
<tr>
<td>PE 121</td>
<td>[1,3]</td>
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</table>

1-5 units of PE activity classes from the following list

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PEA 104</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 106</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 107</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 108</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 116</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 119</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 154</td>
<td>[NP]</td>
</tr>
<tr>
<td>PEA 141</td>
<td>[NP]</td>
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</table>

A.A. Degree: University Preparation, Emphasis in Health & Physical Education (p.176)
<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Name</th>
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<tbody>
<tr>
<td>PEC 102</td>
<td>Water Aerobics</td>
</tr>
<tr>
<td>PEC 104</td>
<td>Badminton</td>
</tr>
<tr>
<td>PEC 108</td>
<td>Deep Water Aerobics</td>
</tr>
<tr>
<td>PEC 111</td>
<td>Beginning Racquetball</td>
</tr>
<tr>
<td>PEC 112</td>
<td>Intermediate Racquetball</td>
</tr>
<tr>
<td>PEC 118</td>
<td>Bowling</td>
</tr>
<tr>
<td>PEC 120</td>
<td>Hip Hop</td>
</tr>
<tr>
<td>PEC 122</td>
<td>Beginning Modern Dance</td>
</tr>
<tr>
<td>PEC 123</td>
<td>Intermediate Modern Dance</td>
</tr>
<tr>
<td>PEC 124</td>
<td>Advanced Modern Dance</td>
</tr>
<tr>
<td>PEC 126</td>
<td>Jazz Dance</td>
</tr>
<tr>
<td>PEC 128</td>
<td>Aerobics</td>
</tr>
<tr>
<td>PEC 130</td>
<td>International Folk Dance</td>
</tr>
<tr>
<td>PEC 133</td>
<td>Ballet 1</td>
</tr>
<tr>
<td>PEC 134</td>
<td>Contact Improvisation</td>
</tr>
<tr>
<td>PEC 140</td>
<td>Exercise for Fitness</td>
</tr>
<tr>
<td>PEC 143</td>
<td>Beginning Golf</td>
</tr>
<tr>
<td>PEC 144</td>
<td>Intermediate Golf</td>
</tr>
<tr>
<td>PEC 145</td>
<td>Advanced Golf</td>
</tr>
<tr>
<td>PEC 147</td>
<td>Gymnastics</td>
</tr>
<tr>
<td>PEC 148</td>
<td>Yoga for Better Health</td>
</tr>
<tr>
<td>PEC 150</td>
<td>Intermediate Yoga for Better Health</td>
</tr>
<tr>
<td>PEC 159</td>
<td>Spirit Leadership Training</td>
</tr>
<tr>
<td>PEC 164</td>
<td>Self-Defense</td>
</tr>
<tr>
<td>PEC 165</td>
<td>Judo</td>
</tr>
<tr>
<td>PEC 166</td>
<td>Intermediate Judo</td>
</tr>
<tr>
<td>PEC 168</td>
<td>Beginning Swimming</td>
</tr>
<tr>
<td>PEC 169</td>
<td>Intermediate Swimming</td>
</tr>
<tr>
<td>PEC 170</td>
<td>Advanced Swimming</td>
</tr>
<tr>
<td>PEC 171</td>
<td>Swim for Fitness</td>
</tr>
<tr>
<td>PEC 172</td>
<td>Lifeguard Training</td>
</tr>
<tr>
<td>PEC 174</td>
<td>Table Tennis</td>
</tr>
<tr>
<td>PEC 175</td>
<td>Beginning Tennis</td>
</tr>
<tr>
<td>PEC 176</td>
<td>Intermediate Tennis</td>
</tr>
<tr>
<td>PEC 177</td>
<td>Advanced Tennis</td>
</tr>
<tr>
<td>PEC 178</td>
<td>Tournament Tennis</td>
</tr>
<tr>
<td>PEC 179</td>
<td>Track and Field</td>
</tr>
<tr>
<td>PEC 182</td>
<td>Training for Distance Running</td>
</tr>
<tr>
<td>PEC 183</td>
<td>Volleyball</td>
</tr>
<tr>
<td>PEC 184</td>
<td>Power Volleyball</td>
</tr>
<tr>
<td>PEC 185</td>
<td>Hiking</td>
</tr>
<tr>
<td>PEC 187</td>
<td>Pilates for Fitness</td>
</tr>
<tr>
<td>PEC 190</td>
<td>Advanced Water Polo</td>
</tr>
<tr>
<td>PEC 191</td>
<td>Power Lifting</td>
</tr>
<tr>
<td>PEC 195</td>
<td>Weight Training</td>
</tr>
<tr>
<td>FEM 108</td>
<td>Advanced Weight Training</td>
</tr>
<tr>
<td>FEM 111</td>
<td>Baseball</td>
</tr>
<tr>
<td>FEM 112</td>
<td>Baseball Team Play Concepts</td>
</tr>
<tr>
<td>FEM 113</td>
<td>Beginning Basketball</td>
</tr>
<tr>
<td>FEM 114</td>
<td>Intermediate Basketball</td>
</tr>
<tr>
<td>FEM 118</td>
<td>Advanced Basketball</td>
</tr>
<tr>
<td>FEM 120</td>
<td>Touch Football and Kanaki</td>
</tr>
<tr>
<td>FEM 122</td>
<td>Advanced Touch Football</td>
</tr>
<tr>
<td>FEM 124</td>
<td>Soccer</td>
</tr>
<tr>
<td>FEM 126</td>
<td>Advanced Wrestling</td>
</tr>
<tr>
<td>FEM 128</td>
<td>Women’s Indoor-Outdoor Soccer</td>
</tr>
<tr>
<td>FEM 129</td>
<td>Women’s Self-Defense</td>
</tr>
<tr>
<td>FEM 130</td>
<td>Women’s Beginning Judo</td>
</tr>
<tr>
<td>FEM 132</td>
<td>Women’s Softball</td>
</tr>
<tr>
<td>FEM 136</td>
<td>Women’s Weight Training</td>
</tr>
<tr>
<td>PEVM 110</td>
<td>Varsity Baseball</td>
</tr>
<tr>
<td>PEVM 115</td>
<td>Men’s Varsity Basketball (Fall)</td>
</tr>
<tr>
<td>PEVM 116</td>
<td>Men’s Varsity Basketball (Spring)</td>
</tr>
<tr>
<td>PEVM 117</td>
<td>Men’s Varsity Cross-Country</td>
</tr>
<tr>
<td>PEVM 120</td>
<td>Varsity Football</td>
</tr>
<tr>
<td>PEVM 122</td>
<td>Men’s Varsity Golf</td>
</tr>
<tr>
<td>PEVM 123</td>
<td>Men’s Varsity Soccer</td>
</tr>
<tr>
<td>PEVM 125</td>
<td>Men’s Varsity Swimming and Diving</td>
</tr>
<tr>
<td>PEVM 130</td>
<td>Men’s Varsity Tennis</td>
</tr>
<tr>
<td>PEVM 135</td>
<td>Men’s Varsity Track and Field</td>
</tr>
<tr>
<td>PEVM 140</td>
<td>Men’s Varsity Water Polo</td>
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<tr>
<td>PEVM 145</td>
<td>Varsity Wrestling</td>
</tr>
<tr>
<td>PEVW 100</td>
<td>Women’s Varsity Basketball (Fall)</td>
</tr>
<tr>
<td>PEVW 101</td>
<td>Women’s Varsity Basketball (Spring)</td>
</tr>
<tr>
<td>PEVW 103</td>
<td>Women’s Varsity Cross-Country</td>
</tr>
<tr>
<td>PEVW 115</td>
<td>Women’s Varsity Golf</td>
</tr>
<tr>
<td>PEVW 120</td>
<td>Women’s Varsity Softball</td>
</tr>
<tr>
<td>PEVW 123</td>
<td>Women’s Varsity Soccer</td>
</tr>
<tr>
<td>PEVW 125</td>
<td>Women’s Varsity Swimming and Diving</td>
</tr>
<tr>
<td>PEVW 130</td>
<td>Women’s Varsity Tennis</td>
</tr>
<tr>
<td>PEVW 135</td>
<td>Women’s Varsity Track and Field</td>
</tr>
<tr>
<td>PEVW 140</td>
<td>Women’s Varsity Volleyball</td>
</tr>
<tr>
<td>PEVW 145</td>
<td>Women’s Varsity Water Polo</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR** ................................................................. 20
Emergency Medical Technician (EMT) Program

EMS 390: Emergency Medical Technician (EMT) I prepares students for certification as an Emergency Medical Technician in the State of California. This one semester, 4 unit course is offered year round. EMT 390 is a comprehensive course that includes classroom instruction, laboratory, and clinical experience. Students are trained to provide emergency care (basic life support level) as an emergency medical service responder (police, fire, ambulance, ranger, rescue squad or industrial emergency operations). Additional lab and clinical hours are required. Contact Community and Economic Development for more information, 575-6714.

Course expenses vary for each individual. The estimated cost for EMS 390 is $250-450 which includes enrollment and materials fees, health clearance, books, and certification examination. For information on Financial Aid, call 575-7700.

Eligibility And Preparation for EMT Program

- High school graduation or equivalent with transcripts on file in the MJC Records Office OR
- High school student, 16 years of age or older, with a minimum GPA of 3.0, verified by transcripts on file in the MJC Records Office.
- Transcripts must be on file in the MJC Records Office prior to the first day of class.

Program Prerequisites

All of the prerequisites must be valid through the end of the course and the EMT certification examination.

- EMS 350 First Responder with Healthcare Provider CPR
- HE 101 Emergency Response/CPFR
- CPR Healthcare Provider Level from the American Heart Association or National Safety Council or Professional Rescuer Level from the American Red Cross

Skills Recognition Award:

Emergency Medical Technician

- To earn a Skills Recognition Award, the student must complete the following required course with a grade of C or better.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 390 [NP]</td>
<td>6</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD

POLICY FOR DENIAL OF CERTIFICATION

The law provides for denial of certification for crimes or acts that may in any way be related to pre-hospital medical care i.e., sex crimes, drug crimes and crimes of violence or dishonesty. In such cases it is the applicant’s responsibility to present sufficient evidence of rehabilitation to the Mountain-Valley Emergency Medical Services Agency prior to applying for certification. The Mountain-Valley EMS Agency will evaluate applicants individually. Any student considering a career as an Emergency Medical Technician, who might be denied certification, is advised to address this issue with this Agency prior to taking this course.

Mountain-Valley Emergency Medical Services Agency

1101 Standiford Ave., Suite D1
Modesto, CA 95350
(209) 529-3085
**Fire Academy**

**Skills Recognition Award: Fire Academy**

The Fire Academy Skills Recognition Award verifies the satisfactory completion of the educational standards for Fire Fighter 1. The Academy does not meet the experience requirement for State Fire Marshal certification, but it does meet the educational and training requirements. Completion Certificate will be provided by the Public Safety division.

**REQUIRED PREPARATION**
- Satisfactory completion of FSCI 301 or equivalent with a grade of C or better
- Satisfactory completion of a physical-agility test with a valid CPAT card
- Physician’s statement of student health

**REQUIRED COURSE - COMPLETE 15 UNITS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI 362</td>
<td>2</td>
<td>Basic Fire Academy</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ........................................ 17

**Fire Science**

**Certificate of Achievement: Fire Science**

- To earn a Certificate of Achievement, the student must complete the coursework as indicated below. Each course must be completed with a grade of C or better.

**REQUIRED COURSE - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI 301</td>
<td>1</td>
<td>Fire Protection Organization</td>
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**ELECTIVE COURSES - COMPLETE 27 UNITS**

<table>
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<tr>
<th>COURSE</th>
<th>UNITS</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>FSCI 302</td>
<td>2</td>
<td>Fire Prevention Technology</td>
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<tr>
<td>FSCI 303</td>
<td>2</td>
<td>Fire Protection Equipment and Systems</td>
</tr>
<tr>
<td>FSCI 304</td>
<td>2</td>
<td>Building Construction for Fire Protection</td>
</tr>
<tr>
<td>FSCI 305</td>
<td>1</td>
<td>Fire Behavior and Combustion</td>
</tr>
<tr>
<td>FSCI 322</td>
<td>4</td>
<td>Fire Science Career Dev./Promotions</td>
</tr>
<tr>
<td>FSCI 323</td>
<td>4</td>
<td>Fire Hydraulics</td>
</tr>
<tr>
<td>FSCI 327</td>
<td>2</td>
<td>Fire Apparatus and Equipment</td>
</tr>
<tr>
<td>FSCI 328</td>
<td>4</td>
<td>Investigation of Fires</td>
</tr>
<tr>
<td>FSCI 332</td>
<td>3</td>
<td>Fire Fighting Tactics and Strategy</td>
</tr>
<tr>
<td>FSCI 336</td>
<td>3</td>
<td>Rescue Practices</td>
</tr>
<tr>
<td>FSCI 337</td>
<td>3</td>
<td>Wildland Fire Control</td>
</tr>
<tr>
<td>FSCI 346</td>
<td>NP</td>
<td>Instructional Methods for Fire Training Officers</td>
</tr>
<tr>
<td>FSCI 347</td>
<td>NP</td>
<td>Fire Prevention I</td>
</tr>
<tr>
<td>FSCI 348</td>
<td>NP</td>
<td>Public Fire Education I</td>
</tr>
<tr>
<td>FSCI 350</td>
<td>NP</td>
<td>Fire Command 1A</td>
</tr>
<tr>
<td>FSCI 351</td>
<td>NP</td>
<td>Fire Command 1B</td>
</tr>
<tr>
<td>FSCI 352</td>
<td>NP</td>
<td>Fire Instructor 1A</td>
</tr>
<tr>
<td>FSCI 353</td>
<td>NP</td>
<td>Fire Instructor 1B</td>
</tr>
<tr>
<td>FSCI 354</td>
<td>NP</td>
<td>Fire Prevention 1A</td>
</tr>
<tr>
<td>FSCI 355</td>
<td>NP</td>
<td>Fire Prevention 1B</td>
</tr>
<tr>
<td>FSCI 356</td>
<td>NP</td>
<td>Fire Management 1</td>
</tr>
<tr>
<td>FSCI 357</td>
<td>NP</td>
<td>Fire Investigation 1</td>
</tr>
<tr>
<td>FSCI 362</td>
<td>2</td>
<td>Basic Fire Academy</td>
</tr>
<tr>
<td>FSCI 364</td>
<td>NP</td>
<td>Driver Operator 1</td>
</tr>
<tr>
<td>FSCI 365</td>
<td>NP</td>
<td>Emergency Aid First Responder</td>
</tr>
<tr>
<td>FSCI 371</td>
<td>NP</td>
<td>Fire Command 2A</td>
</tr>
<tr>
<td>FSCI 372B</td>
<td>NP</td>
<td>Fire Management 2B</td>
</tr>
<tr>
<td>FSCI 373</td>
<td>NP</td>
<td>Fire Instructor 2A</td>
</tr>
<tr>
<td>FSCI 374</td>
<td>NP</td>
<td>Fire Instructor 2B</td>
</tr>
<tr>
<td>FSCI 398</td>
<td>NP</td>
<td>Fire Science Special Topics</td>
</tr>
<tr>
<td>EMS 390</td>
<td>1</td>
<td>Emergency Medical Technician 1</td>
</tr>
<tr>
<td>EMS 391</td>
<td>NP</td>
<td>Emergency Medical Tech. 1 (Refresher)</td>
</tr>
<tr>
<td>NR 379</td>
<td>NP</td>
<td>Wildland Fire Control</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 30

**A.S. Degree: Fire Science**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68) which include completion of the requirements for certificate of achievement in Fire Science.

**UNITS IN AS MAJOR** ........................................ 30
The Architecture program prepares students to transfer to four-year college and university programs. The programs at most universities vary somewhat. The student should consult closely with the architecture staff to ensure that required transfer courses are completed for the specific college that the student selects.

The work of an architect is very complex. Architecture includes the total responsibility for the planning, design, and observation of construction of all types of buildings. Also included is the knowledge of engineering principles, construction methods, materials, new techniques, and procedures as related to the client’s needs. The architecture program is directed to provide the student with the architectural, engineering, mathematics, and general education courses. See advisor for required mathematics and science courses.

### A.S. Degree: Architecture

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. A minimum of 30 units must be completed from required mathematics, science, and Elective Courses for an Associate in Science Degree. See advisor for selection of courses.

#### REQUIRED COURSES - COMPLETE 23 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>(1) Introduction to Engineering &amp; Architecture</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 121</td>
<td>(1) Beginning Graphics &amp; Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>(2) Beginning Graphics &amp; Design 2</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>(2) Architectural Drafting 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 152</td>
<td>(3) Architectural Design 1</td>
<td>5</td>
</tr>
<tr>
<td>ARCH 153</td>
<td>(4) Architectural Design 2</td>
<td>5</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 106</td>
<td>(1) Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>(2) Materials of Construction Lab</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 117</td>
<td>(NP) History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 118</td>
<td>(NP) History of Architecture 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 132</td>
<td>(3) Architectural Drafting 2</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>(4) Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 210</td>
<td>(NP) Introduction to CAD</td>
<td>1</td>
</tr>
<tr>
<td>ENGTC 211</td>
<td>(NP) Intermediate Topics in CAD</td>
<td>1</td>
</tr>
</tbody>
</table>

**UNITS IN AS MAJOR**

30
The Architectural Drafting Technology program prepares students to enter the field of architectural drafting at the entry level as a drafter. The program is for students interested in the more pragmatic and applied aspects of architectural work, and is directed to the application of established scientific and architectural knowledge and methods.

Certificate of Achievement:
Architectural Drafting Technology

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 19 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>Introduction to Engineering &amp; Architecture</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 106</td>
<td>Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 121</td>
<td>Beginning Graphics &amp; Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Beginning Graphics &amp; Design 2</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>Architectural Drafting 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 132</td>
<td>Architectural Drafting 2</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................19

The City and Regional Planning program prepares students to transfer to four-year college and university programs. The programs at most universities vary somewhat. The student should consult closely with the architecture staff to ensure that required transfer courses are completed for the specific college that the student selects.

The work of a city and regional planner is part of the newer awareness of society to protect our environment. Planning includes opportunities with both private industry and/or federal, state, or local governmental agencies. The city and regional planning program is directed to provide the student with undergraduate architectural, engineering, mathematics, and general education courses. See advisor for required mathematics and science courses.

A.S. Degree: City & Regional Planning

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 18 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>Introduction to Engineering &amp; Architecture</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 121</td>
<td>Beginning Graphics &amp; Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Beginning Graphics &amp; Design 2</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>Architectural Drafting 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 152</td>
<td>Architectural Design 1</td>
<td>5</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 12 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 106</td>
<td>Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction Lab</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 117</td>
<td>History of Architecture 1</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 118</td>
<td>History of Architecture 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 132</td>
<td>Architectural Drafting 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 153</td>
<td>Architectural Design 2</td>
<td>5</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Plane Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ENGT 210</td>
<td>Introduction to CAD</td>
<td>1</td>
</tr>
<tr>
<td>ENGT 211</td>
<td>Intermediate Topics in CAD</td>
<td>1</td>
</tr>
<tr>
<td>GEOL 161</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Economic Principles: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Functions &amp; Analytic Geometry</td>
<td>5</td>
</tr>
</tbody>
</table>

**UNITS IN A.S. MAJOR** .................................................................................. 30

A.A. Degree: University Preparation, Emphasis in Biological Sciences (p.174)

A.A. Degree: University Preparation, Emphasis in Chemistry (p.175)
**Construction Management**

The Construction Management program prepares students to transfer to four-year college programs in the same major. Construction managers plan, direct, and coordinate a wide variety of construction projects. Construction managers apply engineering principles and manage project resources to execute architectural designs.

Transfer institutions offer a wide variety of programs with varying requirements, so students must work closely with their counselors and engineering faculty to assure a smooth transition.

### A.S. Degree: Construction Management

- **REQUiRED COURSES** – COMPLETE 8 UNITS
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>Intro to Engineering &amp; Architecture</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 106</td>
<td>Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>Architectural Drafting 1</td>
<td>4</td>
</tr>
</tbody>
</table>

- **ELECTIVE COURSES** – COMPLETE 22 UNITS
  
  Complete a minimum of 5 units from the following:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 134</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 17</td>
<td>Calculus: First Course</td>
<td>5</td>
</tr>
<tr>
<td>MATH 172</td>
<td>Calculus: Second Course</td>
<td>5</td>
</tr>
</tbody>
</table>

Complete a minimum of 4 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>Introductory College Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics: Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics: Waves, Thermodynamics &amp; Optics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>Mechanics, Heat and Waves</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Electricity, Magnetism, Optics, Atomic &amp; Nuclear Structure</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete a minimum of 7 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 101</td>
<td>Economic Principles: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Economic Principles: Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>Managerial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>4</td>
</tr>
</tbody>
</table>

Remainder of elective units may be selected from the three sections above or from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 121</td>
<td>Beginning Graphics and Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Beginning Graphics and Design 2</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>Introduction to Surveying and Topography</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 127</td>
<td>Engineering Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 135</td>
<td>Engineering Mechanics: Statics</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 161</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

**UNITS IN A.S. MAJOR** ................................................................................................................................. 30

---

**Drafting Technology**

The Drafting Technology program combines coursework in both Architectural and Engineering Drafting. The program prepares students to enter the field of drafting at the entry level as a drafter, plan checker, engineering aide, estimator, etc.

A variety of electives are available depending on a student's interest in architectural or engineering topics. It is important that students consult with an advisor to select coursework within their area of choice.

### A.S. Degree: Drafting Technology

- **REQUiRED COURSES** – COMPLETE 18 UNITS
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 121</td>
<td>Beginning Graphics &amp; Design 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>Architectural Drafting 1</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 132</td>
<td>Architectural Drafting 2</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 100</td>
<td>Intro to Engineering &amp; Architecture</td>
<td>10 OR</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>Intro to Engineering &amp; Architecture</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 127</td>
<td>Engineering Graphics</td>
<td>4</td>
</tr>
<tr>
<td>ENGT 210</td>
<td>Intro to Computer-Assisted Drafting</td>
<td>1</td>
</tr>
<tr>
<td>ENGT 211</td>
<td>Intermediate Topics in C.A.D.</td>
<td>1</td>
</tr>
</tbody>
</table>

- **ELECTIVE COURSES** – COMPLETE 12 UNITS
  
  Complete a minimum of 2 units from the following:
  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGTC 375</td>
<td>Construction Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>Uniform Building Code, Structural</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>Uniform Building Code, Non-Structural</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 344</td>
<td>Uniform Mechanical Code</td>
<td>3</td>
</tr>
</tbody>
</table>

Complete a minimum of 3 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 278</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 235</td>
<td>Image Manipulation Software</td>
<td>3</td>
</tr>
</tbody>
</table>

Remainder of elective units may be selected from the two sections above or from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 106</td>
<td>Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Beginning Graphics &amp; Design II</td>
<td>4</td>
</tr>
<tr>
<td>ARCH 152</td>
<td>Architectural Design I</td>
<td>5</td>
</tr>
<tr>
<td>ARCH 153</td>
<td>Architectural Design II</td>
<td>5</td>
</tr>
<tr>
<td>ENGTC 212</td>
<td>Introduction to Surveying and Topography</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 215</td>
<td>Introduction to Solid Modeling</td>
<td>1</td>
</tr>
<tr>
<td>MATH 121</td>
<td>Pre-Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MATH 122</td>
<td>Pre-Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MACH 211D</td>
<td>Machine Tool Technology I</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN A.S. MAJOR** ............................................................................................................................... 30
Engineering

PROGRAM

The Engineering program prepares students to transfer to four-year college and university programs. Most universities have several common undergraduate core classes regardless of the student’s eventual area of specialization (i.e. civil, mechanical, electrical/electronic, aeronautical, agricultural, chemical, industrial, etc.) However, the A.S. program is flexible enough to allow students to tailor their coursework to fit the specific requirements of their selected transfer institution. Students must work closely with their counselors and engineering faculty to assure a smooth transition.

A.S. Degree: Engineering

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES – COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 100</td>
<td>1</td>
</tr>
<tr>
<td>MATH 171</td>
<td>1</td>
</tr>
<tr>
<td>MATH 172</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – COMPLETE 15 UNITS

Complete 6 units minimum Engineering coursework*

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 101</td>
<td>1</td>
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<tr>
<td>ENGR 127</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 130</td>
<td>1</td>
</tr>
<tr>
<td>ENGR 135</td>
<td>1</td>
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<tr>
<td>ENGR 141</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 103</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>1</td>
</tr>
<tr>
<td>MATH 173</td>
<td>1</td>
</tr>
<tr>
<td>MATH 174</td>
<td>1</td>
</tr>
</tbody>
</table>

* ELEcTRICAL ENGINEERING STUDENTS MAY TAKE ENGR 141 ONLY (4 UNITS) AND SUBSTITUTE 2 UNITS OF APPROVED ELECTIVES. SEE FACULTY ADVISOR FOR APPROVAL.

UNITS IN A.S. MAJOR ................................................................. 30

Environmental Science

PROGRAM

A.A. Degree: University Preparation, Emphasis in Environmental Science (p. 175)

The Engineering Technology program prepares students to transfer to four-year college and university programs in Engineering or Industrial Technology. These disciplines focus on the application of engineering principles in design and manufacturing environments. Graduates typically find careers in facilities and plant operations, testing, technical sales and positions as mechanical, manufacturing and computer technicians.

Transfer institutions offer a wide variety of programs with varying requirements, so students must work closely with their counselors and engineering faculty to assure a smooth transition.
Landscape Architecture

PROGRAM

The Landscape Architecture program prepares students to transfer to four-year college and professional programs. Landscape architecture encompasses a broad base of opportunity and service including environmental and resource conservation concerns. These concerns have created a need for more careful planning between man, his built environment, and his natural surroundings.

A.S. Degree: Landscape Architecture

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 19 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 100</td>
<td>1</td>
<td>Introduction to Engineering &amp; Architecture</td>
</tr>
<tr>
<td>ARCH 121</td>
<td>4</td>
<td>Beginning Graphics &amp; Design</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>1</td>
<td>Architectural Drafting 1</td>
</tr>
<tr>
<td>NR 200</td>
<td>4</td>
<td>Soils</td>
</tr>
<tr>
<td>EHS 201</td>
<td>3</td>
<td>Plant Identification and Usage</td>
</tr>
<tr>
<td>EHS* 202</td>
<td>3</td>
<td>Plant Identification and Usage</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 11 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCH 106</td>
<td>2</td>
<td>Materials of Construction</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>1</td>
<td>Materials of Construction Lab</td>
</tr>
<tr>
<td>ARCH 117</td>
<td>3</td>
<td>History of Architecture</td>
</tr>
<tr>
<td>ARCH 118</td>
<td>3</td>
<td>History of Architecture</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>4</td>
<td>Beginning Graphics &amp; Design</td>
</tr>
<tr>
<td>ARCH 132</td>
<td>3</td>
<td>Architectural Drafting 2</td>
</tr>
<tr>
<td>ARCH 152</td>
<td>5</td>
<td>Architectural Design 1</td>
</tr>
<tr>
<td>ARCH 153</td>
<td>5</td>
<td>Architectural Design 2</td>
</tr>
<tr>
<td>ENGR 230</td>
<td>2</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>ENGT 210</td>
<td>1</td>
<td>Introduction to CAD</td>
</tr>
<tr>
<td>ENGT 211</td>
<td>1</td>
<td>Intermediate Topics in CAD</td>
</tr>
<tr>
<td>EHS 210</td>
<td>3</td>
<td>Introduction to Environmental Horticulture</td>
</tr>
</tbody>
</table>

UNITS IN A.S. MAJOR ................................................................................ 30

Mathematics

PROGRAM

A.A. Degree: University Preparation, Emphasis in Mathematics (p. 178)

Physical Science

PROGRAM

A.S. Degree: Physical Science

This curriculum plan is intended for those interested in transferring to a four-year college or university. However, the courses in this program do not necessarily fulfill the prerequisites for the major at any particular institution. Students are encouraged to consult with the physical science and counseling staff in order to choose courses satisfying the prerequisites of the major and addressing the student’s career goals.

• To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 26 UNITS

Complete all of the following courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>5</td>
<td>General Chemistry 1</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>5</td>
<td>General Chemistry 2</td>
</tr>
<tr>
<td>MATH 171</td>
<td>5</td>
<td>Calculus: First Course</td>
</tr>
<tr>
<td>MATH 172</td>
<td>5</td>
<td>Calculus: Second Course</td>
</tr>
</tbody>
</table>

Complete one of the following Physics sequences

Sequence A

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101</td>
<td>4</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>4</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

Sequence B

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101</td>
<td>4</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 103</td>
<td>4</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

Sequence C

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 142</td>
<td>4</td>
<td>Mechanics, Heat, and Waves</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>4</td>
<td>Electricity, Magnetism, Optics, Atomic and Nuclear Structure</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 4 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTRO 141</td>
<td>3</td>
<td>Introduction to Astrophysics</td>
</tr>
<tr>
<td>ASTRO 151</td>
<td>1</td>
<td>Introduction to Astronomy Laboratory</td>
</tr>
<tr>
<td>ASTRO 151</td>
<td>3</td>
<td>Introduction to Astronomy Laboratory</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5</td>
<td>Organic Chemistry 1</td>
</tr>
<tr>
<td>CHEM 113</td>
<td>5</td>
<td>Organic Chemistry 2</td>
</tr>
<tr>
<td>GEOL 161</td>
<td>4</td>
<td>Physical Geology</td>
</tr>
<tr>
<td>EASCI 161</td>
<td>4</td>
<td>Earth Science</td>
</tr>
<tr>
<td>MATH 173</td>
<td>5</td>
<td>Calculus: Third Course</td>
</tr>
</tbody>
</table>

(Either of the following Physics courses that has not been completed above)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 102</td>
<td>4</td>
<td>General Physics</td>
</tr>
<tr>
<td>PHYS 103</td>
<td>4</td>
<td>General Physics</td>
</tr>
</tbody>
</table>

UNITS IN A.S. MAJOR ................................................................................ 30

Physics

PROGRAM

A.A. Degree: University Preparation, Emphasis in Physics (p. 178)
The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Complete and current practices used in industry are emphasized. The orientation is toward theory and hands-on activities required to perform practical repair operations. Related trade and technical information, care and use of equipment and shop safety are also a focus in the Auto Body program.

Certificate of Achievement:

**Autobody/Collision Repair**

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COMPETENCIES**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>4</td>
<td>Pre-Algebra</td>
</tr>
</tbody>
</table>

**REQUIRED COURSES - COMPLETE 23 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 301</td>
<td>5</td>
<td>Automotive Collision Repair 1</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT**

23

**A.A. Degree: Autobody/Collision Repair**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 20 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 302</td>
<td>5</td>
<td>Automotive Collision Repair 2</td>
</tr>
<tr>
<td>AUBDY 303</td>
<td>4</td>
<td>Automotive Collision Repair 3</td>
</tr>
<tr>
<td>AUBDY 304</td>
<td>4</td>
<td>Automotive Collision Repair 4</td>
</tr>
<tr>
<td>AUBDY 399</td>
<td>4</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

**UNITS IN A.A. MAJOR**

20
Autobody Refinishing

PROGRAM

Skills Recognition Award:
Autobody/Refinishing

- To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115 [1]</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 321 [1]</td>
<td>Automotive Spray Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 322 [2]</td>
<td>Automotive Refinishing 2</td>
</tr>
<tr>
<td>AUBDY 399 [3]</td>
<td>Independent Study</td>
</tr>
<tr>
<td>AUBDY 351 [1]</td>
<td>Auto Body Collision Repair 1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD: 10

A.S. Degree: Autobody/Refinishing

- To earn an Associate in Arts Degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework.

REQUIRED COURSES - COMPLETE 31 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115 [1]</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 301 [1]</td>
<td>Automotive Collision Repair 1</td>
</tr>
<tr>
<td>AUBDY 303 [3]</td>
<td>Automotive Collision Repair 3</td>
</tr>
<tr>
<td>AUBDY 304 [4]</td>
<td>Automotive Collision Repair 4</td>
</tr>
<tr>
<td>AUBDY 321 [NP]</td>
<td>Automotive Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 322 [2]</td>
<td>Automotive Refinishing 2</td>
</tr>
<tr>
<td>AUBDY 399 [NP]</td>
<td>Independent Study Special Problems</td>
</tr>
<tr>
<td>AUTEC 321 [NP]</td>
<td>AS: Brakes Systems</td>
</tr>
<tr>
<td>AUTEC 322 [NP]</td>
<td>Steering, Suspension, and Alignment</td>
</tr>
</tbody>
</table>

UNITS IN A.S. MAJOR: 31

Automotive Technology

PROGRAM

The Automotive Technology program is designed to provide training in automobile repair, maintenance theory, study of factory manuals and publications, and applications of methods used in the auto servicing and repair industry.

The Automotive Technology Program offers two levels of training: Automotive Technician and Maintenance Mechanic. The Maintenance Mechanic requires less course work. It provides the student with basic automotive skills to perform basic maintenance and service tasks.

The Technician program of instruction requires additional training in the more sophisticated technologies. This program prepares students to enter technician jobs that perform diagnostic and repair on complex automotive systems.

Certificate of Achievement:
Automotive Technician

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20 [1,2,3]</td>
<td>Pre-Algebra</td>
</tr>
<tr>
<td>OR</td>
<td>Eligibility for MATH 70 by MJC assessment process</td>
</tr>
</tbody>
</table>

REQUIRED COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTECH 115 [1]</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUTECH 311 [1]</td>
<td>Basic Automotive Systems</td>
</tr>
<tr>
<td>ELTEC 208 [2,3]</td>
<td>World of Electricity and Electronics</td>
</tr>
<tr>
<td>MACH 301 [1]</td>
<td>Machine Shop I</td>
</tr>
<tr>
<td>MACH 211D [1]</td>
<td>Machine-Tool Technology</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 28 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTECH 315 [2,3,4]</td>
<td>Engine Rebuilding</td>
</tr>
<tr>
<td>AUTECH 317 [3,4]</td>
<td>A7: Auto Heating and Air Conditioning</td>
</tr>
<tr>
<td>AUTECH 320 [4]</td>
<td>L1: Advanced Engine Performance</td>
</tr>
<tr>
<td>AUTECH 322 [2,3,4]</td>
<td>A4: Steering, Suspension, and Alignment</td>
</tr>
<tr>
<td>AUTECH 323 [2,3,4]</td>
<td>A2: Automatic Transmissions &amp; Transaxes</td>
</tr>
<tr>
<td>AUTECH 399 [2]</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 38
A.S. Degree: Automotive Technician

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>1</td>
<td>Basic Automotive Systems</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>1</td>
<td>World of Electricity</td>
</tr>
<tr>
<td>MACH 301</td>
<td>1</td>
<td>Machine Shop 1</td>
</tr>
<tr>
<td>MACH 211C</td>
<td>1</td>
<td>Machine Tool Technology 1</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>2</td>
<td>A6: Auto Electric/Electronic Systems 1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 319</td>
<td>3½</td>
<td>A8: Engine Performance</td>
</tr>
<tr>
<td>AUTEC 321</td>
<td>3½</td>
<td>A5: Brakes Systems</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>3½</td>
<td>A4: Steering, Suspension, &amp; Alignment</td>
</tr>
<tr>
<td>AUTEC 323</td>
<td>4</td>
<td>A2: Automatic Transmissions &amp; Transaxles</td>
</tr>
<tr>
<td>AUTEC 324</td>
<td>4</td>
<td>A3: Manual Transmissions &amp; Drive Axles</td>
</tr>
<tr>
<td>AUTEC 315</td>
<td>4</td>
<td>Engine Rebuilding</td>
</tr>
<tr>
<td>AUTEC 317</td>
<td>4</td>
<td>A7: Auto Heating &amp; Air Conditioning</td>
</tr>
<tr>
<td>AUTEC 369</td>
<td>3</td>
<td>A6: Automotive Electricity 2</td>
</tr>
</tbody>
</table>

UNITS IN A.S. MAJOR ......................................................... 30

Certificate of Achievement: Maintenance Mechanic

- To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>1,2,3</td>
<td>Pre-Algebra</td>
</tr>
</tbody>
</table>

REQUIRED COURSES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>1</td>
<td>Basic Automotive Systems</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>2</td>
<td>A6: Auto Electric/Electronic Systems 1</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>1</td>
<td>The World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>MACH 301</td>
<td>1</td>
<td>Machine Shop 1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 23 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 315</td>
<td>3½</td>
<td>Engine Rebuilding</td>
</tr>
<tr>
<td>AUTEC 317</td>
<td>3½</td>
<td>A7: Auto Heating and Air Conditioning</td>
</tr>
<tr>
<td>AUTEC 319</td>
<td>3½</td>
<td>A8: Engine Performance</td>
</tr>
<tr>
<td>AUTEC 321</td>
<td>3½</td>
<td>A5: Brakes Systems</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>3½</td>
<td>A4: Steering, Suspension, &amp; Alignment</td>
</tr>
<tr>
<td>AUTEC 323</td>
<td>4</td>
<td>A2: Automatic Transmissions &amp; Transaxles</td>
</tr>
<tr>
<td>AUTEC 324</td>
<td>4</td>
<td>A3: Manual Transmissions &amp; Drive Axles</td>
</tr>
<tr>
<td>AUTEC 369</td>
<td>3</td>
<td>A6: Automotive Electricity 2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.............................. 30

Certificate of Achievement: Building and Safety Code Administration

- To earn a Certificate of Achievement, the student must fulfill the required competencies, complete the 24 required units, and complete at least 6 units from the elective courses. Each course must be completed with a grade C or better.

REQUIRED COMPETENCIES FOR CERTIFICATE:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>4</td>
<td>Pre-Algebra</td>
</tr>
</tbody>
</table>

REQUIRED COURSES - COMPLETE 24 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>INTEC 375</td>
<td>1</td>
<td>Construction Blueprint Reading</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>1</td>
<td>Electrical Codes &amp; Ordinances</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>2</td>
<td>Analysis of Electrical Codes</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>1</td>
<td>Uniform Building Code, Structural</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>2</td>
<td>Uniform Building Code, Nonstructural</td>
</tr>
<tr>
<td>INTEC 344</td>
<td>3</td>
<td>Uniform Mechanical Code</td>
</tr>
<tr>
<td>INTEC 346</td>
<td>3</td>
<td>Enforce Bldg Repair &amp; Abatement Reg.</td>
</tr>
<tr>
<td>INTEC 379</td>
<td>3</td>
<td>Uniform Plumbing Code</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE AT LEAST 6 UNITS FOR A.S. DEGREE OR CERTIFICATE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>2,4</td>
<td>Fundamentals of Industrial Technology</td>
</tr>
<tr>
<td>INTEC 205</td>
<td>2,4</td>
<td>Principles of Quality Control Systems</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>NP</td>
<td>World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>3</td>
<td>Principles of Electrical Wiring</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>2,4</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>ARCH 106</td>
<td>NP</td>
<td>Materials of Construction</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>NP</td>
<td>Materials of Construction - Laboratory</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>NP</td>
<td>Architectural Drafting 1</td>
</tr>
<tr>
<td>ARCH 331</td>
<td>NP</td>
<td>Basic Architectural Drafting 1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.............................. 30

Building & Trades Industry

Courses are intended for students that are interested in career opportunities in the Building Inspection field as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

Certificate of Achievement:

Building and Safety Code Administration

- To earn a Certificate of Achievement, the student must fulfill the required competencies, complete the 24 required units, and complete at least 6 units from the elective courses. Each course must be completed with a grade C or better.

REQUIRED COMPETENCIES FOR CERTIFICATE:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>4</td>
<td>Pre-Algebra</td>
</tr>
</tbody>
</table>

REQUIRED COURSES - COMPLETE 24 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>INTEC 375</td>
<td>1</td>
<td>Construction Blueprint Reading</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>1</td>
<td>Electrical Codes &amp; Ordinances</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>2</td>
<td>Analysis of Electrical Codes</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>1</td>
<td>Uniform Building Code, Structural</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>2</td>
<td>Uniform Building Code, Nonstructural</td>
</tr>
<tr>
<td>INTEC 344</td>
<td>3</td>
<td>Uniform Mechanical Code</td>
</tr>
<tr>
<td>INTEC 346</td>
<td>3</td>
<td>Enforce Bldg Repair &amp; Abatement Reg.</td>
</tr>
<tr>
<td>INTEC 379</td>
<td>3</td>
<td>Uniform Plumbing Code</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE AT LEAST 6 UNITS FOR A.S. DEGREE OR CERTIFICATE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>2,4</td>
<td>Fundamentals of Industrial Technology</td>
</tr>
<tr>
<td>INTEC 205</td>
<td>2,4</td>
<td>Principles of Quality Control Systems</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>NP</td>
<td>World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>3</td>
<td>Principles of Electrical Wiring</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>2,4</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>ARCH 106</td>
<td>NP</td>
<td>Materials of Construction</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>NP</td>
<td>Materials of Construction - Laboratory</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>NP</td>
<td>Architectural Drafting 1</td>
</tr>
<tr>
<td>ARCH 331</td>
<td>NP</td>
<td>Basic Architectural Drafting 1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.............................. 30
A.S. Degree:

Building and Safety Code Administration

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the complete the required courses for certificate of achievement, completion at least 6 elective units. Each course must be completed with a grade C or better.

TOTAL UNITS REQUIRED FOR A.S. MAJOR.................................................... 30

Construction

PROGRAM

Skills Recognition Award:

Construction—Carpentry

REQUIRED COURSES — COMPLETE 13 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 380</td>
<td>Elementary Carpentry &amp; Construction</td>
<td>5</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>Principles of Electrical Wiring</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 201</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>WEX 352</td>
<td>General Work Experience</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES — COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 301</td>
<td>Employability Skills 1</td>
<td>2</td>
</tr>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 375</td>
<td>Construction Blueprint Reading</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD............................................. 15

Skills Recognition Award:

Construction—General

REQUIRED COURSES — COMPLETE 14 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 380</td>
<td>Elementary Carpentry &amp; Construction</td>
<td>5</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>Principles of Electrical Wiring</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>Electrical Codes and Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>Plumbing Principles and Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES — COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 375</td>
<td>Construction Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 366</td>
<td>Heating, Ventilation, Air Conditioning and Refrigeration</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD............................................. 16

Home Building Technologies

PROGRAM

Courses are intended for students that are interested in career opportunities in the Residential Construction field as well as those currently working in the field who need to update or upgrade their knowledge and skills.

Certificate of Achievement:

Home Building Technologies

- To earn a Certificate of Achievement, the student must complete the 24 required units. Each course must be completed with a grade C or better.

REQUIRED COURSES: SELECT 24 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>Principles of Electrical Wiring</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>Electrical Codes &amp; Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>Analysis of Electrical Codes</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>Intro to Occupational Safety &amp; Health</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>Uniform Building Code - Structural</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>Uniform Building Code - Nonstructural</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 346</td>
<td>Enforce Bldg Repair &amp; Abatement Reg</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>Plumbing Principles and Methods</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT........................................ 24

A.S. Degree: Home Building Technologies

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion required courses for certificate and completion of the requirements below.

ELECTIVE COURSES: SELECT 6 OR MORE UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>Fundamentals of Industrial Technology</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 366</td>
<td>Heating, Ventilation, Air Cond. &amp; Refrig.</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 375</td>
<td>Construction Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 379</td>
<td>Uniform Plumbing Code</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 106</td>
<td>Materials of Construction</td>
<td>2</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction - Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR A.S. MAJOR.................................................... 30
Certificate of Achievement: **Electronics Technology-Computer Electronics**

- To earn a Certificate of Achievement, the student must complete the coursework below. All required courses must be completed with a C or better.

**REQUIRED COURSES - COMPLETE 16 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 208*</td>
<td>[1]</td>
<td>The World of Electricity and Electronics</td>
</tr>
<tr>
<td>CMPET 212</td>
<td>[1]</td>
<td>Digital Principles and Circuits</td>
</tr>
<tr>
<td>CMPET 214</td>
<td>[2,3,4]</td>
<td>Microprocessor Programming and Interfacing</td>
</tr>
<tr>
<td>CMPET 206</td>
<td>[2,3,4]</td>
<td>Personal Computer Assembling, Upgrading, and Repair</td>
</tr>
<tr>
<td>CMPSC 204</td>
<td>[2]</td>
<td>Introduction to Programming</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 19 UNITS, AT LEAST 6 IN EACH AREA**

**ELECTRONICS AREA**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET 210</td>
<td>[3,4]</td>
<td>Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET 232</td>
<td>[NP]</td>
<td>Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET 234</td>
<td>[2,3,4]</td>
<td>Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET 269</td>
<td>[2,3,4]</td>
<td>Network+ Certification Training Lab</td>
</tr>
<tr>
<td>ELTEC 221</td>
<td>[2,3or4]</td>
<td>Instrumentation Devices and Systems</td>
</tr>
</tbody>
</table>

**COMPUTER AREA**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 213</td>
<td>[3,4]</td>
<td>Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPSC 263</td>
<td>[3,4]</td>
<td>Networking Essentials</td>
</tr>
<tr>
<td>CMPSC 276</td>
<td>[4]</td>
<td>Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC 278</td>
<td>[3,4]</td>
<td>Spreadsheet Software</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ....................................................... 35

---

**A.S. Degree: Computer Electronics**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. All courses must be completed with a C or better.

**REQUIRED COURSES - COMPLETE 16 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET 210</td>
<td>[3,4]</td>
<td>Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET 227</td>
<td>[2,3,4]</td>
<td>Introduction to Automated Process Control Systems</td>
</tr>
<tr>
<td>CMPET 232</td>
<td>[NP]</td>
<td>Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET 234</td>
<td>[2,3,4]</td>
<td>Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET 269</td>
<td>[2,3,4]</td>
<td>Network+ Certification Training Lab</td>
</tr>
<tr>
<td>CMPET 213</td>
<td>[3or4]</td>
<td>Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPET 263</td>
<td>[3,4]</td>
<td>Networking Essentials</td>
</tr>
<tr>
<td>CMPET 264</td>
<td>[3,4]</td>
<td>Windows Server OS</td>
</tr>
<tr>
<td>CMPSC 204</td>
<td>[2]</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>[1]</td>
<td>World of Electricity and Electronics</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 14 UNITS, AT LEAST 6 IN EACH AREA**

**ELECTRONICS CATEGORY**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET 210</td>
<td>[NP]</td>
<td>Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET 232</td>
<td>[NP]</td>
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<td>CMPET 234</td>
<td>[2,3,4]</td>
<td>Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET 269</td>
<td>[2,3,4]</td>
<td>Network+ Certification Training Lab</td>
</tr>
<tr>
<td>ELTEC 221</td>
<td>[2,3,4]</td>
<td>Instrumentation Devices and Systems</td>
</tr>
</tbody>
</table>

**COMPUTER SCIENCE AREA**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET 211</td>
<td>[3-4]</td>
<td>Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPET 263</td>
<td>[3-4]</td>
<td>Networking Essentials</td>
</tr>
<tr>
<td>CMPSC 276</td>
<td>[4]</td>
<td>Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC 278</td>
<td>[3-4]</td>
<td>Spreadsheet Software</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR MAJOR** .......................................................................................... 30

---

**A.A. Degree: Computer Electronics**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of the requirements below. All courses must be completed with a C or better.

**REQUIRED COURSES - COMPLETE 16 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 204</td>
<td>[2]</td>
<td>Introduction to Programming</td>
</tr>
<tr>
<td>CMPET 206</td>
<td>[2,3,4]</td>
<td>Personal Computer Assembling, Upgrading, and Repair</td>
</tr>
<tr>
<td>CMPET 212</td>
<td>[1]</td>
<td>Digital Principles and Circuits</td>
</tr>
<tr>
<td>CMPET 214</td>
<td>[2,3,4]</td>
<td>Microprocessor Programming and Interfacing</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>[1]</td>
<td>The World of Electricity and Electronics</td>
</tr>
</tbody>
</table>
In the Communication Graphics program, students learn each phase of printing and receive an overview of industry practices. Most courses offer the student a choice of scheduling laboratory hours among several alternatives. Open access and computer-assisted teaching techniques are incorporated with regular instruction. Communication Graphics courses are recommended for students majoring in Advertising, Art, Business, Journalism, and Vocational Printing.

Certificate of Achievement:

Printing and Lithography

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

**COMPETENCIES (FOR CERTIFICATES ONLY)**

**REQUIRED COURSES - COMPLETE 21 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td></td>
<td>Pre-Algebra, Eligibility MATH 70 by MJC Assessment process</td>
</tr>
<tr>
<td>CGR 201</td>
<td>[1]</td>
<td>Graphic Arts Fundamentals</td>
</tr>
<tr>
<td>CGR 211</td>
<td>[1]</td>
<td>Typography 1 (InDesign and QuarkXpress)</td>
</tr>
<tr>
<td>CGR 212</td>
<td>[2]</td>
<td>Electronic Prepress</td>
</tr>
<tr>
<td>CGR 214</td>
<td>[1,2]</td>
<td>Printing Presses and Bindery 1</td>
</tr>
<tr>
<td>CGR 221</td>
<td>[NP]</td>
<td>Image Capture and Manipulation (Photoshop)</td>
</tr>
<tr>
<td>CGR 223</td>
<td>[2,3]</td>
<td>Typography 2 (QuarkXpress, InDesign)</td>
</tr>
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</table>

**ELECTIVE COURSES - COMPLETE 15 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 222</td>
<td>[3]</td>
<td>Image Assembly and Platemaking</td>
</tr>
<tr>
<td>CGR 225</td>
<td>[NP]</td>
<td>Production Screen Printing</td>
</tr>
<tr>
<td>CGR 230</td>
<td>[3]</td>
<td>Graphic Design 1</td>
</tr>
<tr>
<td>CGR 332</td>
<td>[3,4]</td>
<td>Production Presses and Bindery</td>
</tr>
<tr>
<td>CGR 333</td>
<td>[4]</td>
<td>Photo Techniques</td>
</tr>
<tr>
<td>CGR 399</td>
<td>[NP]</td>
<td>Independent Study (with advisor's approval)</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ......................................................... 36

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**A.A. Degree: Printing & Lithography**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of all required courses as listed under the Certificate (21 units), and meet the MJC Associate Degree Requirements. All courses must be completed with a C or better.

**UNITS IN A.A. MAJOR** ..................................................................................................... 21

---

**A.S. Degree: Printing & Lithography**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of all required courses as listed under the Certificate (21 units), plus 10 units from the Elective Courses. All courses must be completed with a C or better.

**UNITS IN A.S. MAJOR** ..................................................................................................... 31

---

**Flexograhic Printing**

Certificate of Achievement:

Flexographic Printing

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 17 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 211</td>
<td>[1]</td>
<td>Typography 1 (InDesign and QuarkXpress)</td>
</tr>
<tr>
<td>CGR 212</td>
<td>[2]</td>
<td>Electronic Prepress</td>
</tr>
<tr>
<td>CGR 214</td>
<td>[1]</td>
<td>Printing Presses and Bindery 1</td>
</tr>
<tr>
<td>CGR 222</td>
<td>[3]</td>
<td>Image Assembly and Platemaking</td>
</tr>
<tr>
<td>CGR 223</td>
<td>[1,2]</td>
<td>Printing Presses and Bindery 2</td>
</tr>
<tr>
<td>CGR 332</td>
<td>[2,3]</td>
<td>Production Presses and Bindery</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ......................................................... 17

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**TOTAL UNITS FOR A.A. MAJOR** ..................................................................................... 71

**TOTAL UNITS FOR A.S. MAJOR** ..................................................................................... 71

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**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ......................................................... 36
Graphic Design

PROGRAM

The Graphic Design Program is structured to develop the capability of the student to creatively solve design problems related to the printed product. The Program incorporates both artistic and technical course work to address the total requirements of the profession.

The Graphic Design field distinguishes itself from the general arts field by emphasizing the application of visual knowledge. Possible job opportunities include: graphic artist, graphic designer, commercial artist, illustrator, and pre-press layout person.

Certificate of Achievement: Graphic Design

- To earn a Certificate of Achievement, the student must meet/complete the following competencies, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES (FOR CERTIFICATE )

MATH 20 Pre-Algebra 4 OR

SPOCM 100 Fundamentals of Public Speaking

SPOCM 102 Introduction to Human Communication

REQUIRED COURSES - COMPLETE 37 UNITS

ART 120 [1,2] Basic Drawing .................................................. 3
ART 124 [1,2] Color and Design 1 .............................................. 3
ART 125 [3] Color and Design 2 .................................................. 3
CGR 201 [1] Graphic Arts Fundamentals ................................... 3
CGR 212 [2] Electronic Prepress ............................................. 3
CGR 221 [2,3] Image Capture and Manipulation (Photoshop) ........ 3
CGR 399A [4] Independent Study (with advisors approval) ......... 1,2,3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................. 37

A.S. Degree: Graphic Design

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 68) or the University Preparation Pathway (p. 68) which include completion of all Required Courses for Associate Degree plus the additional units listed below.

ADDITIONAL REQUIRED COURSES FOR A.S. DEGREE - COMPLETE 11 UNITS:

ART 125 [3] Color and Design 2 .................................................. 3
CGR 221 [2,3] Image Capture and Manipulation (Photoshop) ........ 3
CGR 222 [4] Graphic Design Portfolio Development .................... 1
CGR 331 [3,4] Typography 2 (QuarkXpress, InDesign) ................. 3
CGR 399A [4] Independent Study (with advisors approval) ........... 1

TOTAL UNITS IN A.S. MAJOR .......................................................... 32

Prepress

PROGRAM

Certificate of Achievement: Prepress

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 17 UNITS

CGR 212 [2] Electronic Prepress ............................................. 3
CGR 221 [1,2] Image Capture and Manipulation (Photoshop) ........ 3
CGR 222 [1,3] Image Assembly and Plate Making ...................... 2
CGR 224 [1,2] Electronic Publishing Systems (Illustrator) .............. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................. 17

A.A. Degree: Graphic Design

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 69) which include completion of all Required Courses for Associate Degree plus the additional units listed below. All courses must be completed with a C or better.

REQUIRED COURSES - COMPLETE 21 UNITS

ART 120 [1,2] Basic Drawing .................................................. 3
ART 124 [1,2] Color and Design 1 .............................................. 3
CGR 201 [1] Graphic Arts Fundamentals ................................... 3
CGR 212 [2] Electronic Prepress ............................................. 3

TOTAL UNITS IN A.A. MAJOR .......................................................... 21
Printers and Bindery

Certificate of Achievement:
Printers and Bindery

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 14 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 201</td>
<td>1</td>
<td>Graphic Arts Fundamentals</td>
</tr>
<tr>
<td>CGR 214</td>
<td>1</td>
<td>Printing Presses and Bindery 1</td>
</tr>
<tr>
<td>CGR 222</td>
<td>1,3</td>
<td>Image Assembly and Platemaking</td>
</tr>
<tr>
<td>CGR 223</td>
<td>1,2</td>
<td>Printing Presses and Bindery 2</td>
</tr>
<tr>
<td>CGR 332</td>
<td>2,3</td>
<td>Production Presses and Bindery (Focus on Offset Presses)</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT........................................... 14

Printing Maintenance

Certificate of Achievement:
Printing Maintenance

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 214</td>
<td>1</td>
<td>Printing Presses and Bindery 1</td>
</tr>
<tr>
<td>CGR 223</td>
<td>1,2</td>
<td>Printing Presses and Bindery 2</td>
</tr>
<tr>
<td>CGR 332</td>
<td>2</td>
<td>Production Presses and Bindery</td>
</tr>
<tr>
<td>MACH 301</td>
<td>NP</td>
<td>MachineShop 1</td>
</tr>
<tr>
<td>ELTEC 265</td>
<td>NP</td>
<td>Troubleshooting Techniques</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>NP</td>
<td>The World of Electricity</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT........................................... 15

*Students completing 2 or more certificates will need to replace the second or third CGR 332 with a 399B Independent Study

General Plant Maintenance

Certificate of Achievement:
General Plant Maintenance

- To earn a Certificate of Achievement, the student must meet/complete the competencies for the Communication Graphics Program, and complete the coursework as indicated. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 23 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>1,2</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>INTEC 202</td>
<td>2</td>
<td>Fundamentals of Industrial Technology</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>1</td>
<td>Industrial Mech. Components &amp; Equip</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>1</td>
<td>Introduction to Plant Maintenance</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>2</td>
<td>Plumbing Principles and Methods</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>4</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>ENGT 375</td>
<td>3</td>
<td>Construction Blueprint Reading</td>
</tr>
<tr>
<td>MACH 301</td>
<td>4</td>
<td>Machine Shop 1</td>
</tr>
<tr>
<td>WELD 200</td>
<td>3</td>
<td>Arc and Gas Welding</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – SELECT AT LEAST 3 UNITS FOR CERTIFICATE. SELECT AT LEAST 9 UNITS FOR A.S. DEGREE

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 208</td>
<td>NP</td>
<td>World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>NP</td>
<td>Industrial Elec. Comp. &amp; Control Dev</td>
</tr>
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<td>INTEC 226</td>
<td>NP</td>
<td>Motors and Motor Controls</td>
</tr>
<tr>
<td>INTEC 262</td>
<td>1,3</td>
<td>Hydraulics/Pneumatics</td>
</tr>
<tr>
<td>INTEC 362</td>
<td>1,3</td>
<td>Industrial Refrigeration Systems</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT........................................... 24

A.A. Degree: General Plant Maintenance

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 68) or the University Preparation Pathway (p. 68) which include completion of the 21 required units for certificate. All courses must be completed with a C or better.

TOTAL UNITS REQUIRED FOR A.A. MAJOR.................................................... 21

A.S. Degree: General Plant Maintenance

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68) which include completion of the 21 required units and 9 elective units for certificate. All courses must be completed with a C or better.

TOTAL UNITS REQUIRED FOR A.S. MAJOR................................................... 30
The Electronics Technology Program prepares students to enter industry as Electronics Technicians or to transfer to a four-year university program. An Industrial Electronics study option and a Computer Electronics study option are available. Students receive theoretical and laboratory instruction in electrical/electronic principles, analog and digital devices, electrical/electronic systems, computer hardware, industrial equipment and control systems. Consult with an Electronics Advisor for selection of courses and options.

Classes in Electronics Technology are offered in theoretical and manipulative skills leading to the associate degree. Students may also select a program for transfer to a state university.

**Certificate of Achievement:**

**Industrial Electronics**

- To earn a Certificate of Achievement, the student must complete all required courses with a C or better, and complete the electives as indicated.

**REQUIRED COMPETENCIES**

MATH 70  
Elementary Algebra............................... 5 OR Qualification for MATH 90 through Assessment

**REQUIRED COURSES - COMPLETE 28 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 221</td>
<td>[3]</td>
<td>Instrumentation Devices and Systems .......... 3</td>
</tr>
<tr>
<td>ELTEC 229</td>
<td>[3,4]</td>
<td>Commercial and Industrial Wiring .......... 3</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>[2]</td>
<td>Introduction to Programmable Logic Controllers .......... 2</td>
</tr>
<tr>
<td>ELTEC 265</td>
<td>[1]</td>
<td>Troubleshooting .......... 1</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 7 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>[NP]</td>
<td>Fundamentals of Industrial Technology .......... 2</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>[NP]</td>
<td>Industrial Mechanical Components &amp; Equip .......... 2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 35**

**A.S. Degree: Industrial Electronics**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68) which include completion of the requirements below. All courses must be completed with a C or better.

**REQUIRED COURSES - COMPLETE 26 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 221</td>
<td>[3]</td>
<td>Instrumentation Devices and Systems .......... 3</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>[2]</td>
<td>Introduction to Programmable Logic Controllers .......... 2</td>
</tr>
<tr>
<td>ELTEC 265</td>
<td>[1]</td>
<td>Troubleshooting .......... 1</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 4 UNITS**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ELTEC 214</td>
<td>[2,3,4]</td>
<td>Introduction to Microprocessors &amp; Digital Systems .......... 4</td>
</tr>
<tr>
<td>INTEC 202</td>
<td>[NP]</td>
<td>Fundamentals of Industrial Technology .......... 2</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>[NP]</td>
<td>Industrial Mechanical Components &amp; Equip .......... 3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 30**

**Certificate of Achievement:**

**Industrial Technology - Electrician**

Courses are intended for students that are interested in career opportunities as Residential, Plant, or Facilities Electricians as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

**REQUIRED COURSES: COMPLETE 23 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 230</td>
<td>[1]</td>
<td>Blueprint Reading .......... 1</td>
</tr>
<tr>
<td>ELTEC 320</td>
<td>[2]</td>
<td>Electrical Safety .......... 1</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>[1]</td>
<td>World of Electricity &amp; Electronics .......... 3</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>[3]</td>
<td>Introduction to Plant Maintenance .......... 3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES: COMPLETE AT LEAST 7 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 232</td>
<td>[3,4]</td>
<td>Introduction to Programmable Logic Controllers .......... 2</td>
</tr>
<tr>
<td>HE 100</td>
<td>[NP]</td>
<td>Standard First Aid/CPR .......... 1</td>
</tr>
<tr>
<td>INTEC 221</td>
<td>[4]</td>
<td>Instrumentation Devices and Systems .......... 3</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>[2,4]</td>
<td>Analysis of Electrical Codes .......... 3</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>[NP]</td>
<td>Introduction to Occupational Safety and Health .......... 3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................ 30**
### A.S. Degree:

**Industrial Technology - Electrician**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68). The requirements include completion of 24 required units and at least 4 elective units. Each course must be completed with a grade C or better.

**TOTAL UNITS REQUIRED FOR A.S. MAJOR** ……………………………………………………... 30

### INDUSTRIAL TECHNOLOGY Maintenance

Courses are intended for students who are interested in career opportunities in the Plant or Facilities Maintenance fields as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

**Certificate of Achievement:**

**Industrial Technology - Maintenance**

- To earn a Certificate of Achievement, the student must complete the 24 required units. Each course must be completed with a grade C or better.

**REQUIRED COURSES - COMPLETE 24 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>[2,4]</td>
<td>Fundamentals of Industrial Technology</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>[1,3]</td>
<td>Industrial Mech. Components &amp; Equip</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>[1]</td>
<td>Industrial Elec. Comp. &amp; Control Dev.</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 226</td>
<td>[2,4]</td>
<td>Motors and Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>[3]</td>
<td>Introduction to Plant Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>[2,4]</td>
<td>Intro to Occupational Safety &amp; Health</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 362</td>
<td>[1]</td>
<td>Industrial Refrigeration Systems</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>[3]</td>
<td>Plumbing Principles and Methods</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</td>
<td>[NP]</td>
<td>Arc and Gas Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ……………………………………………………... 24

### A.S. Degree:

**Industrial Technology - Systems**

Courses are intended for students who are interested in career opportunities in the Plant or Facilities Instrumentation and Controls fields as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

**Certificate of Achievement:**

**Industrial Technology - Systems**

- To earn a Certificate of Achievement, a student must complete the 26 required units and complete at least 4 elective units. Each course must be completed with a grade C or better.

**REQUIRED COURSES – COMPLETE 26 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 208</td>
<td>[1]</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 221</td>
<td>[2]</td>
<td>Instrumentation Devices &amp; Systems</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>[1]</td>
<td>Industrial Elec. Comp. &amp; Control Dev.</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>[3]</td>
<td>Electrical Codes &amp; Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>[4]</td>
<td>Analysis of Electrical Codes</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>[3]</td>
<td>Introduction to Plant Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>[4]</td>
<td>Intro to Occupational Safety &amp; Health</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>[3]</td>
<td>Intro to Program. Logic Controllers</td>
<td>2</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES – COMPLETE AT LEAST 4 UNITS FOR A.S. DEGREE OR CERTIFICATE**

Choose any other INTEC courses ……………………………………………………………………... 4

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ……………………………………………………... 30

### A.S. Degree:

**Industrial Technology - Maintenance**

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68) which include completion of 24 required units for certificate of achievement, and at least 6 elective units. All courses must be completed with a grade C or better.

**TOTAL UNITS REQUIRED FOR A.S. MAJOR** …………………………………………………………... 30

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>[NP]</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 201</td>
<td>[1]</td>
<td>Intro to Industrial Operations</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>[NP]</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 262</td>
<td>[1,3]</td>
<td>Hydraulics/Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 350</td>
<td>[4]</td>
<td>Industrial Technology Internship</td>
<td>2</td>
</tr>
<tr>
<td>MACH 211D</td>
<td>[NP]</td>
<td>Machine Tool Technology 1</td>
<td>4</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED FOR A.S. MAJOR** …………………………………………………………... 30
## Industrial Technology Technician

Courses are intended for students that are interested in careers as Production Technicians or Operators, as well as those currently working in the industry that need to update or upgrade their knowledge and skills.

### Certificate of Achievement:

**Industrial Technology – Technician**

- To earn a Certificate of Achievement, student must complete the 17 required units and complete at least 12 units from the elective courses. Each course must be completed with a grade C or better.

#### REQUIRED COURSES – COMPLETE 17 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 201</td>
<td>Intro to Industrial Operations</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 202</td>
<td>Fundamentals of Industrial Technology</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>Industrial Mech. Components &amp; Equip.</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 205</td>
<td>Principles of Quality Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>Industrial Elec. Comp. &amp; Control Dev.</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 301</td>
<td>Employability Skills 1</td>
<td>2</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES – COMPLETE AT LEAST 12 UNITS FOR CERTIFICATE

Choose any other INTEC courses

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 29

---

## Machine Tool Technology Program

### Skills Recognition Award: CNC Operator

- To earn a Skills Recognition Award, student must complete the 6 required units. This series of courses is intended to give the student a sufficient skill base to be able to operate and to edit programs for basic CNC lathes and CNC milling machines that are commonly used in manufacturing applications.

#### REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 219</td>
<td>Introduction to CNC Mill Programming</td>
<td>2</td>
</tr>
<tr>
<td>MACH 222</td>
<td>CNC Machine Operations</td>
<td>2</td>
</tr>
<tr>
<td>MACH 223</td>
<td>Advanced CNC Machine Operations</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 6

### Skills Recognition Award: CNC Programmer

- To earn a Skills Recognition Award, student must complete the 11 required units. Each course must be completed with a C or better.

#### REQUIRED COURSES – COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MACH 218</td>
<td>Intro to CNC Lathe Programming</td>
<td>2</td>
</tr>
<tr>
<td>MACH 219</td>
<td>Intro to CNC Mill Programming</td>
<td>1</td>
</tr>
<tr>
<td>MACH 220</td>
<td>CNC Machine Tool Programming</td>
<td>4</td>
</tr>
<tr>
<td>MACH 222</td>
<td>CNC Machine Operations</td>
<td>2</td>
</tr>
</tbody>
</table>

#### ELECTIVE COURSES - COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MACH 310</td>
<td>Advanced Topics in Machining</td>
<td>1</td>
</tr>
<tr>
<td>MACH 311</td>
<td>CNC Programming with Macros</td>
<td>1</td>
</tr>
<tr>
<td>MACH 312</td>
<td>4 Axis Mill Programming &amp; Operation</td>
<td>1</td>
</tr>
<tr>
<td>MACH 314</td>
<td>3D Part Programming for CNC</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 11

### Skills Recognition Award: Machine Tool Technology 1

- To earn a Skills Recognition Award, student must complete the 16 required units. Each course must be completed with a C or better.

#### REQUIRED COURSES – COMPLETE 16 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 211D</td>
<td>Machine Tool Technology</td>
<td>4</td>
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<tr>
<td>MACH 212D</td>
<td>Machine Tool Technology</td>
<td>4</td>
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<tr>
<td>MACH 213 C</td>
<td>Machine Tool Technology</td>
<td>3</td>
</tr>
<tr>
<td>MACH 399</td>
<td>Independent Study</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Arc &amp; Gas Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL REQUIRED UNITS FOR SKILLS RECOGNITION AWARD ................................ 16
Certificate of Achievement:
Machine Tool Technology 2

- To earn a Certificate of Achievement, student must complete the 27 required units and one course from the elective.

REQUIRED COMPETENCIES FOR CERTIFICATE

MATH 20 Elementary Algebra ................................................................. 4 OR
Math 70 eligibility through assessment process

REQUIRED COURSES - COMPLETE 27 UNITS

MACH 211E [1] Machine Tool Technology 1 .................................................. 5
WELD 200 [1] Arc and Gas Welding ................................................................. 3
MACH 219 [2] Introduction to CNC Mill Programming ...................................... 2
MACH 399 [3] Independent Study ................................................................. 2 OR
MACH 310 [3] Advanced Topics in Machining ............................................... 2 OR
MACH 218 [3] Intro to CNC Lathe Programming ............................................ 2

Complete 2 units from the following:

ENGTC 376 [NP] Mechanical Blue Print Reading .......................................... 2 OR
ENG 220 [NP] Basic Engineering Graphics ....................................................... 2 OR
INTEC 376 [NP] Mechanical Blue Print Reading .............................................. 2

ELECTIVE COURSES - COMPLETE 3 UNITS

WELD 204 [2,3] Gas Metal Arc Welding ....................................................... 3 OR
WELD 206 [2,3] Gas Tungsten Arc Welding .................................................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................. 30

A.S. Degree: Machine Tool Technology

- To earn an Associate in Science Degree, student must complete the 27 Required units, 3 elective units, and meet the MJC Associate Degree requirements. The classes within this series is intended to address the needs of those who wish to obtain an AS degree in Machine Tool Technology or are interested in advancing the skills developed while obtaining the Machine Tool Technology 1 certificate.

UNITS IN A.S. MAJOR .................................................................................. 30

Maintenance Electrician

PROGRAM

Courses are intended for students that are interested in career opportunities in the Plant or Facilities Maintenance Electrician field as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

Certificate of Achievement:
Maintenance Electrician

- To earn a Certificate of Achievement, a student must complete the 24 required units. Each course must be completed with a grade C or better.

REQUIRED COURSES — COMPLETE 24 UNITS

INTEC 208 [1] World of Electricity & Electronics ............................................. 3
INTEC 222 [2] Industrial Elec. Comp. & Control Dev ....................................... 3
INTEC 229 [3,4] Commercial and Industrial Wiring ......................................... 3
INTEC 248 [2] Electrical Codes & Ordinances ................................................. 3
INTEC 261 [3] Introduction to Plant Maintenance ............................................ 3
INTEC 265 [NP] Troubleshooting Techniques .................................................. 1
ELTEC 232 [4] Intro to Program. Logic Controllers ......................................... 2

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................. 24

A.A. Degree: Maintenance Electrician

- To earn a Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p.71) or the University Preparation Pathway (p.69) which include completion of 21 required units. All courses must be completed with a grade C or better.

REQUIRED COURSES — COMPLETE 21 UNITS

INTEC 115 [2,3] Introduction to Technical Industries ....................................... 1
INTEC 223 [1] Industrial Elec. Comp. & Control Dev ...................................... 3
INTEC 229 [3,4] Commercial and Industrial Wiring ......................................... 3
INTEC 248 [4] Electrical Codes & Ordinances ................................................. 3
INTEC 261 [3] Introduction to Plant Maintenance ............................................ 3
ELTEC 232 [4] Intro to Program. Logic Controllers ......................................... 2

TOTAL UNITS REQUIRED FOR A.A. MAJOR .................................................... 21
A.S. Degree: Maintenance Electrician

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 71) or the University Preparation Pathway (p. 68) which include completion of 25 required units, and at least 5 elective units. All courses must be completed with a C or better.

REQUIRED COURSES – COMPLETE 25 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>INTEC 208</td>
<td>[1]</td>
<td>World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>INTEC 229</td>
<td>[3,4]</td>
<td>Commercial and Industrial Wiring</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>[3]</td>
<td>Electrical Codes &amp; Ordinances</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>[3]</td>
<td>Introduction to Plant Maintenance</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>[4]</td>
<td>Intro to Program. Logic Controllers</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR A.S. MAJOR: 30

ELECTIVE COURSES – COMPLETE AT LEAST 5 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Course Title</th>
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<tbody>
<tr>
<td>INTEC 115</td>
<td>[NP]</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>INTEC 221</td>
<td>[2,4]</td>
<td>Instrumentation Devices &amp; Systems</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>[4]</td>
<td>Analysis of Electrical Codes</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>[2,4]</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED FOR A.S. MAJOR: 30

Skills Recognition Award: Maintenance Machinist 1

- To earn a Skills Recognition Award, student must complete the 9 units. This series of courses is intended to meet the needs of those students interested in pursuing career opportunities in the machining and plant engineering and maintenance fields. The Maintenance Machinist series of classes is similar in content to the Machine Tool Tech classes offered during the day.

REQUIRED COURSES – COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MACH 301</td>
<td>[1]</td>
<td>Machine Shop 1</td>
</tr>
<tr>
<td>WELD 200</td>
<td>[NP]</td>
<td>Arc &amp; Gas Welding</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD: 9

Certificate of Achievement: Maintenance Machinist 2

- To earn a Certificate of Achievement, student must complete the 18 required units and 3 units of electives. This series of courses is intended to address the needs of those who are interested in advancing the skills developed in the Maintenance Machinist 1 certificate program.

REQUIRED COMPETENCIES FOR CERTIFICATE

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
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<td>Elementary Algebra</td>
</tr>
</tbody>
</table>

Math 70 eligibility through assessment process

REQUIRED COURSES – COMPLETE 18 UNITS

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<thead>
<tr>
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<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 301</td>
<td>[1]</td>
<td>Machine Shop 1</td>
</tr>
<tr>
<td>MACH 299</td>
<td>[4]</td>
<td>Independent Study</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>[NP]</td>
<td>Intro to Plant Maintenance</td>
</tr>
<tr>
<td>WELD 200</td>
<td>[2,3]</td>
<td>Arc &amp; Gas Welding</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 306</td>
<td>[NP]</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>WELD 204</td>
<td>[2,3]</td>
<td>Gas Metal Arc Welding</td>
</tr>
<tr>
<td>WELD 206</td>
<td>[2,3]</td>
<td>Gas Tungsten Arc Welding</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 21
Welding Program

Student will be able to gas and arc weld in all positions as well as use gas and arc cutting equipment. Upon completion of the A.A./A.S. Degree in welding, the student will be employable in the trades or will be able to transfer to a state university for study in an industrial-related degree program.

REQUIRED COMPETENCIES

FOR ALL CERTIFICATES AND SKILLS RECOGNITIONS: All students who plan to earn a certificate must also meet the following competencies.

MATH 20 Pre-Algebra ................................................................. 4 OR Eligibility for MATH 70 by MJC assessment process

Skills Recognition Award:

Fabricator Technician

- To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 16 UNITS

WELD 200 [1] Arc and Gas Welding ......................................................... 3
SM 331 [1] Sheet Metal & Installation ..................................................... 3
WELD 204 [2] Gas Metal & Flux Core Welding ......................................... 3
WELD 300 [2] Intermediate Welding ...................................................... 3
WELD 399 [2,3] Independent Study ....................................................... 1

TOTAL UNITS FOR SKILLS RECOGNITION AWARD........................................ 16

Skills Recognition Award:

Gas Metal Arc Welding

- To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 10 UNITS

WELD 200 [1] Arc and Gas Welding ......................................................... 3
WELD 300 [2] Intermediate Welding ...................................................... 3
WELD 204 [3] Gas Metal Arc (MIG) and Flux Core Welding (FCAW) ....... 3
WELD 399A [2,3] Independent Study ....................................................... 1

TOTAL UNITS FOR SKILLS RECOGNITION AWARD........................................ 10

Skills Recognition Award:

Pipe Welding

- To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 10 UNITS

WELD 200 [1] Arc and Gas Welding ......................................................... 3
WELD 300 [2] Intermediate Welding ...................................................... 3
WELD 399A [2,3] Independent Study ....................................................... 1

TOTAL UNITS FOR SKILLS RECOGNITION AWARD........................................ 10
**Skills Recognition Award:**

**Sheet Metal Fabricator**

- To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES – COMPLETE 10 UNITS**

- **WELD 200 [1]** Arc and Gas Welding ................................................................. 3
- **SM 331 [1]** Sheet Metal & Installation 1 ............................................................ 3
- **SM 332 [2]** Sheet Metal & Installation 2 ............................................................ 3
- **WELD 399 [2]** Independent Study ................................................................. 1

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD** ........................................... 10

**Certificate of Achievement: Welding**

- To earn a Certificate of Achievement, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES – COMPLETE 21 UNITS**

- **WELD 200 [1]** Arc and Gas Welding ................................................................. 3
- **SM 331 [1]** Sheet Metal & Installation 1 ............................................................ 3
- **WELD 204 [2]** Gas Metal & Flux Core Welding .................................................... 3
- **WELD 206 [2]** Gas Tungsten Arc Welding .......................................................... 3
- **WELD 300 [2]** Intermediate Welding .............................................................. 3
- **WELD 325 [3]** Design & Fabrication Process .................................................... 3
- **WELD 340 [3]** Pipe Welding .................................................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 21

**A.A. Degree: Welding**

- To earn an Associate in Arts Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework for the Certificate in Welding.

**A.S. Degree: Welding**

- To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below.

**REQUIRED COURSES – COMPLETE 30 UNITS**

- **INTEC 306 [2,4]** Introduction to Occupational Safety and Health ...................... 3
- **MACH 211C [NP]** Machine Tool Technology 1 ................................................ 3
- **SM 331 [2]** Sheet Metal & Installation 1 ............................................................ 3
- **WELD 200 [1]** Arc & Gas Welding ................................................................. 3
- **WELD 204 [2]** Gas Metal Arc (MIG) Flux Core Arc (FCAW) .............................. 3
- **WELD 206 [2]** Gas Tungsten Arc Welding (TIG) .................................................. 3
- **WELD 300 [2]** Intermediate Welding .............................................................. 3
- **WELD 325 [3]** Design and Fabrication Processes ............................................... 3
- **WELD 340 [3]** Pipe Welding .................................................................................. 3
- **WELD 399A [2,3,4]** Independent Study/Special Problems .................................. 1
- **WELD 399B [2,3,4]** Independent Study/Special Problems .................................. 2

**TOTAL UNITS IN AS MAJOR ........................................................................ 30
Educational Programs in

General Studies &
University Preparation

Derek Waring, Dean
MJC Counseling Center
East Campus, Morris 103
(209) 575-6080

Transfer Preparation Degrees:
AA - University Preparation, Emphasis in Agricultural Science
AA - University Preparation, Emphasis in Art and Design
AA - University Preparation, Emphasis in Chemistry
AA - University Preparation, Emphasis in Communication
AA - University Preparation, Emphasis in Environmental Science
AA - University Preparation, Emphasis in Geography
AA - University Preparation, Emphasis in Health and Physical Education
AA - University Preparation, Emphasis in Liberal Studies (Teacher Preparation)
AA - University Preparation, Emphasis in Mathematics
AA - University Preparation, Emphasis in Physics

Non-Transferable Degrees:
AA - General Studies, Emphasis in Natural Sciences
AA - General Studies, Emphasis in Social and Behavioral Sciences
AA - General Studies, Emphasis in Humanities
AA - General Studies, Emphasis in Language and Rationality

General Studies with Emphasis PROGRAM

The Associate of Arts in General Studies with Emphasis provides an opportunity for you to earn an Associate of Arts (AA) degree in a comprehensive area of study. This degree is intended for students who may not be planning to transfer to a university in the near future.

The General Studies degree is intended to provide both breadth and depth of education. Breadth is achieved by completion of the 18-unit MJC-GE Pattern for the Associate’s Degree. Depth is achieved when you complete an additional 18-unit Emphasis in one of four areas: Natural Sciences, Social and Behavioral Sciences, Humanities, or Language and Rationality. By completing this pattern of study, you will have a “well rounded” education in addition to lower-division course work in related disciplines which can be used as preparation for a field of study.

DEGREE REQUIREMENTS:
1. Follow the Career and Technical Education Pathway for associate degree on page 71 of the 2009-2010 MJC Catalog. Satisfactory completion of this pathway will result in an associate degree from Modesto Junior College.

2. In fulfillment of the Career and Technical Education Pathway degree requirements, select and complete a General Studies emphasis from the following pages. Coursework completed in fulfillment of a General Education requirement cannot be reapplied toward a General Studies emphasis.
### A.A. Degree: General Studies, Emphasis in Natural Sciences

Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. Students will develop an appreciation and understanding of the scientific method and an understanding of the relationships between science and other human activities.

#### REQUIRED COURSES

- For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines. Complete 6 units in each. Students may not double-count units with General Education courses.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AG 376</td>
<td>Basic Science and Laboratory Techniques</td>
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<td>ANAT 125</td>
<td>Human Anatomy</td>
<td>3</td>
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<tr>
<td>ANSC 200</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AP 50</td>
<td>Elementary Human Anat-Physiology</td>
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</tr>
<tr>
<td>AP 150</td>
<td>Integrative Anatomy &amp; Physiology</td>
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<tr>
<td>ANTHR 101</td>
<td>Physical Anthropology</td>
<td>3</td>
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<tr>
<td>ANTHR 105</td>
<td>Physical Anthropology Lab</td>
<td>7</td>
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<tr>
<td>ASTRO 141</td>
<td>Introduction to Astronomy</td>
<td>3</td>
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<tr>
<td>BIO 50</td>
<td>Basic Biology</td>
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<tr>
<td>BIO 101</td>
<td>Biological Principles</td>
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<td>BIO 111</td>
<td>General Biology</td>
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<tr>
<td>BIO 115</td>
<td>Genetics, Evolution &amp; Society</td>
<td>3</td>
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<tr>
<td>BIO 128</td>
<td>The Sierra Nevada</td>
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<td>BIO 130</td>
<td>Introduction to Marine Vertebrates</td>
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<td>BIO 130/130L</td>
<td>Intro Marine Vertebrates w/ Lab</td>
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<tr>
<td>BIO 140</td>
<td>Introduction to Marine Biology</td>
<td>3</td>
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<tr>
<td>BIO 145</td>
<td>Introduction to Freshwater Biology</td>
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<tr>
<td>BOT 110</td>
<td>Plant Biology</td>
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<tr>
<td>CHEM 101</td>
<td>General Chemistry 1</td>
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<td>CHEM 142</td>
<td>Pre-General Chemistry</td>
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<td>CHEM 143</td>
<td>Introductory College Chemistry</td>
<td>5</td>
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<tr>
<td>CHEM 150</td>
<td>Exploring our Chemical Environment</td>
<td>3</td>
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<tr>
<td>CHEM 164</td>
<td>Introductory Chemistry Laboratory</td>
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<tr>
<td>EASCI 161</td>
<td>Earth Science</td>
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<tr>
<td>EASCI 162</td>
<td>Introduction to Oceanography</td>
<td>4</td>
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<tr>
<td>ELTEC 208</td>
<td>World of Electricity and Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ENSCI 108</td>
<td>Environmental Conservation</td>
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<td>FDNFR 219</td>
<td>Nutrition</td>
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<tr>
<td>FDNFR 351</td>
<td>Practical Nutrition</td>
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<tr>
<td>GEDG 101</td>
<td>Physical Geography</td>
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<td>GEDL 64</td>
<td>Geology of National Parks</td>
<td>3</td>
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<tr>
<td>GEDL 160</td>
<td>Introduction to Geology</td>
<td>3</td>
</tr>
<tr>
<td>GEDL 161</td>
<td>Geophysical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEDL 165</td>
<td>Geology of California</td>
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<td>GEDL 166</td>
<td>Historical Geography</td>
<td>3</td>
</tr>
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<td>INTEC 208</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>METEO 160</td>
<td>Introduction to Weather &amp; Climate</td>
<td>3</td>
</tr>
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<td>METEO 161</td>
<td>Introduction to Meteorology</td>
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<tr>
<td>MICRO 101</td>
<td>Microbiology</td>
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<td>NR 200</td>
<td>Soils</td>
<td>4</td>
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<tr>
<td>NR 215</td>
<td>Wildlife Production</td>
<td>3</td>
</tr>
<tr>
<td>NR 230</td>
<td>Introductory Forestry</td>
<td>3</td>
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<tr>
<td>PHSCI 52</td>
<td>The Way Things Work</td>
<td>3</td>
</tr>
<tr>
<td>PHSCI 161</td>
<td>Science Matters</td>
<td>3</td>
</tr>
<tr>
<td>PHSCI 164</td>
<td>Physical Science Environmental Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>General Physics- Mechanics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>Mechanics, Heat, &amp; Waves</td>
<td>4</td>
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<tr>
<td>PHYS 150</td>
<td>Concepts of Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 160</td>
<td>Descriptive Introduction to Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 160/164</td>
<td>Introduction to Physics &amp; Physics Environmental Lab</td>
<td>(3/1)</td>
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<tr>
<td>PHYS 165</td>
<td>Introductory Physics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 169</td>
<td>Conceptual Physics: A Hands-On Approach</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 170</td>
<td>Introductory Human Physiology</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 173</td>
<td>Introduction to Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>Introduction to Plant Science</td>
<td>3</td>
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<td>PLSC 230</td>
<td>Fruit Science</td>
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<tr>
<td>PSYCH 103</td>
<td>Introduction to Neuroscience</td>
<td>3</td>
</tr>
<tr>
<td>ZOOL 110</td>
<td>Animal Biology</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN EMPHASIS** ........................................................................................................ 18

### A.A. Degree: General Studies, Emphasis in Humanities

Courses in the humanities are those that study the cultural activities and artistic expressions of human beings. Students will develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creations and develop aesthetic understanding, and an ability to make value judgments.

#### REQUIRED COURSES

- For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines. Complete 6 units in each. Students may not double-count units with General Education courses.

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>Language, Culture &amp; Communication</td>
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<tr>
<td>ARCH 117</td>
<td>History of Architecture 1</td>
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<td>ARCH 118</td>
<td>History of Architecture 2</td>
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### Programs in General Studies and University Preparation

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<td>Introduction to World Dance</td>
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**A.A. Degree: General Studies, Emphasis in Language and Rationality**

Courses in language and rationality are those that study English composition, communication, and analytical thinking. Students will develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication, whatever symbol system the students use.

**Required Courses**
- For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines and complete 6 units in each discipline. Students may not double-count units with General Education courses.

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**Total Units in Emphasis**

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**TOTAL UNITS IN EMPHASIS**

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18
A.A. Degree:

General Studies,

Emphasis in Social & Behavioral Sciences

Courses in the social and behavioral sciences are those that focus on people as members of society. Courses will stimulate critical thinking about the ways people act and have acted in response to their societies and will promote appreciation of how societies and social subgroups operate.

REQUIRED COURSES

- For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines and complete 6 units in each discipline. Students may not double-count units with General Education courses.

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TOTAL UNITS IN EMPHASIS ............................................................................. 18
University Preparation with Emphasis PROGRAM

What is the University Preparation degree?
The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. While completion of this program does not guarantee admission to a specific college or university, it allows you to complete preparatory courses that may apply toward the area of study in which you plan to major at your targeted transfer university, and to complete general education requirements required by CSU and UC for bachelor’s (baccalaureate) degree. It entails an interdisciplinary approach to learning that will allow you to simultaneously meet your unique transfer goals and and fulfill lower division requirements for bachelor’s degree at many CSU or UC institutions. You will do this by completing a rigorous general education experience with either the CSU-GE or IGETC general education patterns, in addition to completing an emphasis in a particular field or program.

How does it work?
Each emphasis has been crafted to help you prepare for upper-division coursework in a baccalaureate major at a four-year university. By fulfilling the requirements of the MJC emphasis, you will also be completing some or all lower-division preparation for baccalaureate major at the university. ASSIST (www.assist.org) is a statewide database of recorded transfer agreements between community colleges and universities. You are advised to used ASSIST in selecting courses from the emphasis to ensure that the coursework applies to your baccalaureate major.

Prepare for transfer with some majors at MJC
Not every program at MJC offers a degree designed for transfer-oriented students. However, many programs do offer AA or AS majors which function like the emphasis for transfer-oriented students. Those majors are included on the following pages to help you make the right decision when determining the best transfer-oriented path of study.

DEGREE REQUIREMENTS
1. Complete the requirements for the University Preparation Pathway as listed on page 69 of the 2008-2009 MJC Catalog. Satisfactory completion of this pathway will result in an associate degree from Modesto Junior College.

2. In fulfillment of those requirements, complete a AA or AS major from this catalog or an emphasis from the following pages.
   • If you complete an AA or AS major, your degree will read: "AA or AS in ____________"
   • If you complete an emphasis, your degree will read: "AA in University Preparation, Emphasis in ____________."
A.A. Degree: University Preparation, Emphasis in Agricultural Sciences

Agricultural Science emphasis includes disciplines related to the management of soil, water, air, plant and animal resources, particularly pertaining to the agricultural industry. Students can expect to gain a general understanding of science-related topics such as biology, animal science, crop, soil and water science, horticulture, and toxicology, and often humanities-related topics, such as communications, public relations, social services, marketing, education and economics. More advanced topics often cover pests and diseases, plant physiology, animal health and management, soil and water engineering, ranching and agribusiness, and education.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

**REQUIRED COURSES - TAKE 4 COURSES.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEC 280</td>
<td>Agricultural Accounting and Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ASEC 285</td>
<td>Agricultural Computing Applications</td>
<td>3</td>
</tr>
<tr>
<td>ASEC 290</td>
<td>Agricultural Sales and Service</td>
<td>3</td>
</tr>
<tr>
<td>AGM 200</td>
<td>Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGM 215</td>
<td>Machinery Management 3 OR</td>
<td>3</td>
</tr>
<tr>
<td>AGM 220</td>
<td>Industrial/Agricultural Machinery 3 OR</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 201</td>
<td>Livestock Feeding and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 202</td>
<td>Sheep Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 203</td>
<td>Dairy Industry/Dairy Science</td>
<td>3</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Economic Principles: Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>EHS 276</td>
<td>Environmental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>EHS 281</td>
<td>Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 138</td>
<td>Calculus for Business and Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>NR 220</td>
<td>Introductory Forestry</td>
<td>3</td>
</tr>
<tr>
<td>NR 222</td>
<td>Native Tree and Shrub Identification</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 205</td>
<td>Field Crops</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 215</td>
<td>Vegetable Crops</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 230</td>
<td>Fruit Science</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>Plant Nutrition and Fertilizer</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>Plant Disease Control</td>
<td>3</td>
</tr>
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</table>

**ELECTIVE COURSES – TAKE 5 UNITS.**

<table>
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<th>Course Code</th>
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<tbody>
<tr>
<td>ART 120</td>
<td>Basic Drawing 1</td>
</tr>
<tr>
<td>ART 124</td>
<td>Color and Design 1</td>
</tr>
<tr>
<td>ART 140</td>
<td>Sculpture 1</td>
</tr>
<tr>
<td>ART 164</td>
<td>History of Art 1</td>
</tr>
<tr>
<td>ART 165</td>
<td>History of Art 2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS REQUIRED IN AREA OF EMPHASIS** .............................................. 18

A.A. Degree: Architecture

Students intending to transfer from MJC to a college or university as Architecture majors are advised to complete the requirements of the Associate of Science (AS) Degree in Architecture on (p. 149). This degree has been specifically designed to prepare students for transfer.

**REQUIRED COURSES – TAKE 12 UNITS.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 250</td>
<td>Plant Nutrition and Fertilizer</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>Plant Disease Control</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 205</td>
<td>Field Crops</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 215</td>
<td>Vegetable Crops</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 230</td>
<td>Fruit Science</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>Plant Nutrition and Fertilizer</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>Plant Disease Control</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General Chemistry 1</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry 2</td>
<td>5</td>
</tr>
<tr>
<td>MATH 134</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 171</td>
<td>Calculus: First Course</td>
<td>5</td>
</tr>
<tr>
<td>MATH 172</td>
<td>Calculus: Second Course</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>Mechanics, Heat, and Waves</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Electricity, Magnetism, Optics, Atomic and Nuclear Structure</td>
<td>4</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES – TAKE 8-10 UNITS.**

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select two courses from the following list of electives. Additional courses may be required by your transfer university.

- The student cannot count Art 164 or 165 for both required and elective units but may count one class as required and the other as elective.

**TOTAL UNITS REQUIRED IN AREA OF EMPHASIS** .............................................. 21-23

A.A. Degree: University Preparation, Emphasis in Biological Sciences

The study of biology includes various aspects of life, including basic organization (molecular, cellular, tissues, organs), how organisms function, their roles in the natural environment, how hereditary information is transferred, and development of biotechnology.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

**REQUIRED COURSES – TAKE 13 UNITS.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 250</td>
<td>Plant Nutrition and Fertilizer</td>
<td>3 OR</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>Plant Disease Control</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>General Chemistry 1</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>General Chemistry 2</td>
<td>5</td>
</tr>
<tr>
<td>MATH 134</td>
<td>Elementary Statistics</td>
<td>5</td>
</tr>
<tr>
<td>MATH 171</td>
<td>Calculus: First Course</td>
<td>5</td>
</tr>
<tr>
<td>MATH 172</td>
<td>Calculus: Second Course</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>Mechanics, Heat, and Waves</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>Electricity, Magnetism, Optics, Atomic and Nuclear Structure</td>
<td>4</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES – TAKE 8-10 UNITS.**

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 2 courses within one area from the following list of electives. Additional courses may be required by your transfer university.

**TOTAL UNITS REQUIRED IN AREA OF EMPHASIS** .............................................. 21-23
A.A. Degree: University Preparation, Emphasis in Chemistry

ABOUT THIS EMPHASIS
Chemistry is the branch of physical science that deals with the elementary substances, or forms of matter, of which all bodies are composed; the laws that regulate the combination of these elements in the formation of compound bodies, and the various phenomena that accompany their exposure to diverse physical conditions.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – COMPLETE 10 UNITS.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 102</td>
<td>5</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – COMPLETE 8-10 UNITS

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 2 courses within one area from the following list of electives. Additional courses may be required by your transfer university.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 112</td>
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<tr>
<td>CHEM 113</td>
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<td>MATH 171</td>
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<td>MATH 172</td>
<td>5</td>
</tr>
<tr>
<td>MATH 173</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS IN REQUIRED IN AREA OF EMPHASIS ............................ 18-20

A.A. Degree: University Preparation, Emphasis in Communications

ABOUT THIS EMPHASIS
The study of communication focuses on how people produce and process messages, and how their message options and decisions affect others’ thoughts, attitudes, and behaviors.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – COMPLETE 9 UNITS.

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SPCOM 100</td>
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<td>SPCOM 103</td>
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<tr>
<td>SPCOM 104</td>
<td>3</td>
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</tbody>
</table>

ELECTIVE COURSES – COMPLETE 9 UNITS.

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 9 units from the following list of electives. Additional courses may be required by your transfer university.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 178</td>
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<tr>
<td>SPCOM 102</td>
<td>3</td>
</tr>
<tr>
<td>SPCOM 105</td>
<td>2</td>
</tr>
<tr>
<td>SPCOM 106</td>
<td>3</td>
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</tbody>
</table>

TOTAL UNITS REQUIRED IN AREA OF EMPHASIS ................................. 18

A.A. Degree: Computer Science

Students intending to transfer as Computer Science majors are advised to complete the requirements of the AA in Computer Science on (p. 131) in the MJC Catalog. This major has been specifically designed to prepare students for transfer.

A.S. Degree: Engineering

Students intending to transfer as Engineering majors are advised to complete the requirements for the AS in Engineering (p. 152) in the MJC Catalog. This major has been specifically designed to prepare students for transfer.

A.A. Degree: English

Students intending to transfer as English majors are advised to complete the requirements for the AA in English (p. 143) in the MJC Catalog. This major has been specifically designed to prepare students for transfer.

A.A. Degree: University Preparation, Emphasis in Environmental Science

ABOUT THIS EMPHASIS
Environmental Science is a field of inquiry exploring living systems and their complex relationships with the world’s diverse human cultures. Understanding such relationships is an inherently interdisciplinary endeavor, requiring insights from the Environmental and Social Sciences, as well as the Humanities.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – COMPLETE 18 UNITS.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>5</td>
</tr>
<tr>
<td>BOT 101</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>5 OR</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 161</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL UNITS REQUIRED IN AREA OF EMPHASIS ................................. 18

A.A. Degree: University Preparation, Emphasis in Geography

ABOUT THIS EMPHASIS
Geography is the study of global patterns created through Earth processes and human behaviors. Geographers utilize a unique holistic approach which examines interrelationships found within the culture, economics, politics, history, and physical environment of specific geographical regions.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – COMPLETE 9 UNITS.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 101</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>3</td>
</tr>
</tbody>
</table>
programs in general studies and university preparation

ELECTIVE COURSES — COMPLETE 9 UNITS.

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select three courses from the following list of electives. Please see your instructor to help you determine which courses may be most appropriate based upon your intended focus of study within the discipline and transfer institution. Additional courses may be required by your transfer university.

- ECON 101 [NP] Economic Principles: Macroeconomics .................................................. 3
- ECON 102 [NP] Economic Principles: Macroeconomics .................................................. 3
- GEOG 104 [NP] California Geography ........................................................................ 3
- GEOG 109* [NP] Introduction to Geographic Information Systems .................................. 3
- HIST 104 [NP] Western Civilization ........................................................................... 3
- HIST 105 [NP] Western Civilization ........................................................................... 3
- HIST 125 [NP] History of Mexico ................................................................................. 3
- HIST 129 [NP] History of California ............................................................................ 3
- HIST 145 [NP] Latin American History ...................................................................... 3
- POLSC 110 [NP] International Relations .................................................................... 3
- POLSC 111 [NP] War and Peace: from Lenin to Al Qaeda ........................................... 3
- POLSC 140 [NP] Comparative Politics ....................................................................... 3
- POLSC 145 [NP] Third World International Politics .................................................... 3
- POLSC 190 [NP] Model United Nations ...................................................................... 3

TOTAL UNITS REQUIRED IN AREA OF EMPHASIS ................................................. 18

A.A. Degree: University Preparation, Emphasis in Health and Physical Education

ABOUT THIS EMPHASIS

Health Science draws from the biological, environmental, psychological, social, physical and medical sciences to develop individual, group, institutional, community and systemic strategies to improve health knowledge and attitudes as well as skills and behavior.

Physical Education is a multifaceted field of study in which movement or physical activity is the intellectual focus. Kinesiology is a common name for college and university academic departments that examine physical activity.

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES — COMPLETE THE FOLLOWING FOUR COURSES.

- ANAT 125 [NP] Human Anatomy .......................................................... 5
- BIO 111 [NP] General Biology ........................................................................ 4
- CHEM 143 [NP] Introductory College Chemistry .............................................. 5
- PHYSIO 101 [NP] Introductory Human Physiology ........................................... 5

TOTAL UNITS REQUIRED IN AREA OF EMPHASIS ................................................. 19

A.A. Degree: Language Studies

Students intending to transfer as language majors are advised to complete the requirements of the AA in Spanish in the MJC Catalog or AA in Language Studies on page 2 of this addendum. These majors have been specifically designed to prepare students for transfer. Note: For 2009-2010, the AA in Foreign Language will be revised to become the AA in Language Studies.
A.A. Degree: University Preparation, Emphasis in Liberal Studies
(Teacher Education at CSU Stanislaus)

This emphasis is especially designed for students who plan to transfer into California State University, Stanislaus’ Liberal Studies major or into their Blended Teacher Preparation Program. It is designed for students interested in teaching in public and private elementary schools. The program provides a broad overview of the fields of natural science, social sciences, humanities, composition, mathematics, and critical thinking in order to prepare the future teacher for the standards-based curriculum required in public schools. Further education at the university level will be required to fulfill all requirements for a teaching credential authorizing service in California public schools.

Note to students: If you are interested in transferring to a four-year college or university other than CSU Stanislaus to pursue a bachelor’s degree in this major, it is critical that you meet with a Modesto Junior College counselor and/or refer to the ASSIST website (www.assist.org) to select and plan the courses for your major. Schools vary widely in terms of the required preparation for this major. The courses that MJC requires for this Area of Emphasis may be different from the preparation requirements needed for the Bachelor’s degree at a different university.

1. 60 UNITS - COMPLETE 60 UNITS NUMBERED 100-299

2. GPA - EARN AN OVERALL GPA OF 2.0 OR HIGHER BASED ON ALL COURSEWORK ATTEMPTED IN COLLEGE COURSES NUMBERED 50-399

3. GUIDANCE REQUIREMENT

Complete ONE of the following courses to fulfill the GUIDANCE requirement for Associate Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE 109</td>
<td>Orientation for Foreign Students</td>
<td>1</td>
</tr>
<tr>
<td>GUIDE 110</td>
<td>Educational Planning</td>
<td>1</td>
</tr>
<tr>
<td>GUIDE 111</td>
<td>Career Awareness</td>
<td>1</td>
</tr>
<tr>
<td>GUIDE 112</td>
<td>Job Development Skills</td>
<td>1.5</td>
</tr>
<tr>
<td>GUIDE 116</td>
<td>Orientation for Re-Entry Adults</td>
<td>2</td>
</tr>
<tr>
<td>GUIDE 120</td>
<td>Success Strategies for Transfer Students</td>
<td>3</td>
</tr>
</tbody>
</table>

4. ACTIVITIES REQUIREMENT

FULFILL THE ACTIVITIES REQUIREMENT FOR ASSOCIATE DEGREE

(Double-counts with Area C.1 below)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Basic Drawing 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 124</td>
<td>Color and Design 1</td>
<td>3</td>
</tr>
<tr>
<td>ART 140</td>
<td>Sculpture 1</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MTH 160</td>
<td>Fundamentals of Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

5. GENERAL EDUCATION REQUIREMENT

- Fulfill the general education requirement for associate degree by completing the CSU-GE Transfer Pattern as specified below with a C or better in each course.

### CSU-GE: AREA A

Communication in the English Language and Critical Thinking

- **AREA A.1** – COMPLETE ONE OF THE FOLLOWING COURSES:
  - SPCCOM 100 [NP] Fundamentals of Public Speaking
  - SPCCOM 102 [NP] Introduction to Human Communication

- **AREA A.2** – COMPLETE THE FOLLOWING COURSE:
  - ENGL 101 [NP] Composition and Reading

- **AREA A.3** – COMPLETE ONE OF THE FOLLOWING COURSES:
  - CMSC 103 [NP] Symbolic Logic
  - ENGL 103 [NP] Advanced Composition and Critical Thinking
  - PHIL 103 [NP] Symbolic Logic

### CSU-GE: AREA B

Physical Universe, its Life Forms & Mathematical Concepts

- **AREA B.1** – COMPLETE THE FOLLOWING COURSE:
  - EASC 161 [NP] Earth Science
  - (Double-counts for Area of Emphasis below)

- **AREA B.2** – COMPLETE THE FOLLOWING COURSE:
  - BIO 111 [NP] General Biology
  - (Double-counts for Area of Emphasis below)

- **AREA B.3** – (FULFILLED THROUGH SATISFACTORY COMPLETION OF AREAS B.1 AND B.2)

### CSU-GE: AREA C

Arts, Literature, Philosophy, and Foreign Language

- **AREA C.1** – MET WITH FULFILLMENT OF MJC ACTIVITIES REQUIREMENT ABOVE

- **AREA C.2** – COMPLETE ONE OF THE FOLLOWING COURSES:
  - ENGL 169 [NP] Children’s Literature (preferred by CSU Stanislaus)
  - ENGL 168 [NP] Adolescent Literature

- **AREA C.3** – COMPLETE ONE OF THE FOLLOWING COURSES:
  - HUMAN 101 [NP] Introduction to the Humanities
  - HUMAN 105 [NP] Early Humanities Traditions
  - HUMAN 106 [NP] Humanities in the Modern World
  - HUMAN 110 [NP] East Meets West
  - MUSC 110 [NP] Music Appreciation (preferred by CSU Stanislaus)
  - MUSC 112 [NP] History of Western Music 1
  - MUSC 113 [NP] History of Western Music 2
  - MUSC 118 [NP] Introduction to American Popular Music
  - MUSC 169 [NP] Introduction to World Music
  - PHIL 101 [NP] Philosophy
  - PHIL 111 [NP] Ethics: Theory and Application
  - PHIL 115 [NP] Religion: A Philosophical and Comparative Inquiry
  - PHIL 121 [NP] History of Philosophy: Modern
  - PHIL 123 [NP] 20th Century Philosophy
  - PHIL 140 [NP] Philosophy and Film

### CSU-GE: AREA D

Social, Political, and Economic Institutions and Behavior

- **AREA D** – COMPLETE THREE COURSES, ONE FROM EACH AREA:
  - **CSU-GE AREA D.1** – COMPLETE THE FOLLOWING COURSE:
    - HIST 101 [NP] History of the U.S. through Reconstruction
  - **CSU-GE AREA D.2** – COMPLETE ONE COURSE
    - HIST 102 [NP] History of the U.S. post Civil War
    - POLS 101 [NP] American Politics
  - **CSU-GE AREA D.3** – COMPLETE ONE COURSE
    - GEOG 102 [NP] Cultural Geography
    - GEOG 105 [NP] Economic Geography
    - GEOG 110 [NP] World Regional Geography
CSU-GE AREA E. - COMPLETE ONE OF THE FOLLOWING COURSES

- PSYCH 141 [NP] Human Lifespan ................................................................. 3
- CLDDV 103 [NP] Child Growth and Development ........................................ 3

(TOTAL UNITS REQUIRED TO FULFILL GENERAL EDUCATION 42 1/2-45)

6. COMPLETE THE LIBERAL STUDIES EMPHASIS

Complete the required and elective courses for the AREA OF EMPHASIS IN LIBERAL STUDIES with a C or better in each course.

REQUIRED COURSES – COMPLETE 16 UNITS

- SOCS 109 [NP] Intro to Education – Practicum .............................................. 2
- SOCS 110 [NP] Intro to Education ................................................................. 3
- BIO 111 [NP] Biology (Double-counts with Area B.2) ..................................... 4
- EASCI 161 [NP] Earth Science (Double-counts with Area B.1) ....................... 4
- HIST 106 [NP] History .................................................................................. 3

ELECTIVE COURSES – COMPLETE ONE COURSE

- CMPSC 201 [NP] General Computer Literacy .................................................. 3
- CMPSC 203 [NP] Technical Computer Literacy ............................................... 3
- HIST 129 [NP] History of California .............................................................. 3
- MATH 106 [NP] Structure of Mathematics 2 .................................................... 4

TOTAL UNITS IN AREA OF EMPHASIS ................................................................ 19-20

A.A. Degree: Mass Communications (Journalism, Radio, or Television)

Students intending to transfer as mass communications majors are advised to complete the requirements of the AA in Journalism, AA in Radio Broadcasting, or AA in Television Production in the MJC Catalog. These majors have been specifically designed to prepare students for transfer.

A.A. Degree: University Preparation, Emphasis in Mathematics

Mathematics is the science of numbers and their operations, interrelations, combinations, generalizations, and abstractions and of space configurations and their structure, measurement, transformations, and generalizations.

REQUIRED COURSES – COMPLETE 20 UNITS.

- MATH 171 [NP] Calculus: First Course ............................................................. 5
- MATH 172 [NP] Calculus: Second Course ....................................................... 5
- MATH 173 [NP] Calculus: Third Course ........................................................... 5
- MATH 174 [NP] Introduction to Linear Algebra and Ordinary Diff. Equations .... 5

TOTAL UNITS IN AREA OF EMPHASIS ................................................................ 20

A.A. Degree: Physical Science

Students intending to transfer as Physical Science majors are advised to complete the requirements of the Associate of Science (AS) in Physical Science on p. 153. This major has been specifically designed to prepare students for transfer.

A.A. Degree: University Preparation, Emphasis in Physics

- To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the or the University Preparation Pathway (p. 69 which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – COMPLETE 20 UNITS.

Complete two of the following physics courses:

- PHYS 101 [NP] General Physics: Mechanics ................................................. 4
- PHYS 102 [NP] General Physics: Waves, Thermodynamics, and Optics .......... 4
- PHYS 103 [NP] General Physics: Electricity, Magnetism, & Modern Physics .... 4

Complete two of the following mathematics courses:

- MATH 171 [NP] Calculus: First Course ............................................................. 5
- MATH 172 [NP] Calculus: Second Course ....................................................... 5
- MATH 173 [NP] Calculus: Third Course ........................................................... 5
- MATH 174 [NP] Introduction to Linear Algebra and Ordinary Diff. Equations .... 5

TOTAL UNITS IN AREA OF EMPHASIS ................................................................ 18

A.A. Degree: Theater

Students intending to transfer as theatre majors are advised to complete the requirements of the Associate of Arts in Theatre on 121. This major has been specifically designed to prepare students for transfer. Be sure to work with your counselor and a member of the theatre faculty in designing your program.

A.A. Degree: Music

Students intending to transfer as music majors are advised to complete the requirements of the Associate of Arts (AA) in Music on 118. This major has been specifically designed to prepare students for transfer. Be sure to work with your counselor and a member of the music faculty in designing your program.
Courses Offered at Modesto Junior College
### How to read course descriptions

<table>
<thead>
<tr>
<th>Course Prefix and Number</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 165——INTRODUCTORY PHYSICS</td>
<td>5 Units</td>
</tr>
<tr>
<td><strong>Introduction to Physics through the study of laboratory measurement in selected topics to include mechanics, wave motion, thermodynamics, and electricity and magnetism.</strong> Develops the theoretical and experimental foundation for PHYS 107 and PHYS 142. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A)</td>
<td></td>
</tr>
<tr>
<td>PHYS 180——CONCEPTUAL PHYSICS: A HANDS-ON APPROACH</td>
<td>4 Units</td>
</tr>
<tr>
<td><strong>Prerequisite: Satisfactory completion of MATH 122 or eligibility for MATH 175 as determined by the MJC Assessment Process. A survey course of lectures in physical science designed to provide students with practical experience in applying physical concepts.</strong> (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A)</td>
<td></td>
</tr>
</tbody>
</table>

### PHYS (Physiology)

| PHYS 101——INTRODUCTORY HUMAN PHYSIOLOGY | 5 Units |
| **Study of body function, organ system integration, communication, and interaction at the biochemical, cellular, and systems level. Includes control of circulatory, respiratory, and nervous systems.** (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A) |
| PHYS 103——INTRODUCTION TO NEUROSCIENCE | 3 Unit(s) |
| **Prerequisite:** Satisfactory completion of PHYS 101 Also offered as PHYS 103 |
| Introduction to the biological basis of behavior. Emphasizes understanding of the nervous system, neurotransmission, neurochemistry, psychophysiology, and applied to the understanding of peripheral processes, psychotropic drugs, mood regulation, and mental illness. Focus on learning and memory, language, emotion, stress, and stress responses. (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A) |

### PLSC (Plant Science)

| PLSC 50——PREPARATORY PLANT SCIENCE | 3 Units |
| **Preparatory course in which students learn about the structure, growth processes, physiology, growth media, biological competition, and pest and disease factors of field, horticultural, and ornamental plants.** (A-F or P/NP) Lecture/Laboratory. |
| PLSC 200——INTRODUCTION TO PLANT SCIENCE | 3 Units |
| **Introduction to plant science, including structure, growth processes, propagation, physiology, growth media, biological competition, and pest and disease factors of field, horticultural, and ornamental plants.** Lecture (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) |

| PLSC 205——FIELD CROPS | 3 Units |
| **Economic importance, cultivation, irrigation, integrated pest management, soil analysis, calendar of operations, and marketing in the production of field crops (including barley, wheat, corn, grapes, soybeans, alfalfa, rice, dry beans, sugar beets, cotton, and citrus crops).** Lecture/lab (A-F or P/NP) Transfer: CSU, UC. |
| PLSC 215——VEGETABLE CROPS | 3 Units |
| **Vegetable crops common to the area, economic importance, cultivation, irrigation, pest management, soil analysis, calendar of operations, and marketing in the production of vegetable crops.** Field trips required. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC. |
| PLSC 230——FRUIT SCIENCE | 3 Units |
| **Elementary culture of fruit and nut crops including growing habits, varieties, characteristics, and adaptations, environmental factors influencing local fruit production, grading and marketing procedures on local fruit crops.** Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A) |
| PLSC 235——PLANT PROPAGATION/PRODUCTION | 3 Units |
| **Recommended for Success:** Satisfactory completion of PLSC 200 and/or FRSC 210. Also offered as FRSC 210. Plant propagation and production practices with emphasis on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, plant pest and disease control, structure and use of lay. Preparation and use of propagating and planting mediums. Use and maintenance of common tools and equipment. Regulations pertaining to plant production. Field trips required. One completion allowed. Lecture/Laboratory. Not offered every semester. (A-F or P/NP) Transfer: CSU, UC. |
| PLSC 241——VITICULTURE | 3 Units |
| **California grape production, study of table and wine grape varieties, vines, adaptations and products, production practices, propagation and planting, training, pruning and irrigation systems, recognition and control of grape pests and disease. Student is required to design a new vineyard and critique a management operation.** Field trips required. Full (A-F only) Transfer: CSU, UC. |
| PLSC 250——PLANT NUTRITION AND FERTILIZER | 3 Units |
| **Recommended for Success:** Before enrolling in this course, students are strongly advised to satisfactorily complete NR 200. An overview of plant nutritional principles in order to understand fertilizers, amendments, their uses, value, applications, and relationship to soil and crops grown in the area. Deficiency symptoms, pH, soil and plant tissue testing, and environmental factors and concerns. Fertilizers required. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC. |
| PLSC 255——PLANT PEST CONTROL | 3 Units |
| **Study of crop insects and their morphology, identification, life cycles, host and habitat relationships, methods and materials of control.** Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC. |
| PLSC 260——PLANT DISEASE CONTROL | 3 Units |
| **Study of common local soilborne diseases and their economic importance, identification, life cycles, host and habitat relationships, and methods of control.** Field trips required. Lecture/Laboratory. Transfer: CSU, UC. |
| PLSC 267——INTEGRATED PEST MANAGEMENT | 1 Unit |
| **Formerly listed as PLSC 207** |
| Current topics and discussion on integrated pest management, designed to satisfy Department of Pesticide Regulations requirements for certified pest control applicator certification programs. Foliation may be required. Unlisted completion allowed. (A-F only) Transfer: CSU, UC. |
| PLSC 285——PRUNING | 1 Unit |
| **Pruning of deciduous fruits, nuts, and vines. Care and maintenance of tools and equipment. Proper techniques, fertilization, and pest control also included. Field trips required. Lecture/Laboratory. Saturday lab. (A-F only) Transfer: CSU, UC. |
| PLSC 287——INTRODUCTION TO PLANT SCIENCE | 3 Units |
| **Introduction to the biological basis of behavior. Emphasizes understanding of the nervous system, neurotransmission, neurochemistry, psychophysiology, and applied to the understanding of peripheral processes, psychotropic drugs, mood regulation, and mental illness. Focus on learning and memory, language, emotion, stress, and stress responses. (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE A) (CSU-GE B1, B3) (IGETC 5A) |

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Lecture and/or Laboratory.</th>
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<tbody>
<tr>
<td><strong>Hours arranged:</strong> Laboratory time arranged on individual basis. (A-F Only) Letter grade only for course completion. (P/NP Only) Credits/No Credit only, no letter grade given. (A-F or P/NP) Option to complete course for letter grade or as a Pass/No Pass basis. Parentheses will contain one or more of the following:</td>
<td></td>
</tr>
<tr>
<td>Transfer: indicates the transferrability of a course to Columbia College, California State University (CSU) or University of California (UC), and/or whether or not the course has TCSU (LDTP) Articulation, or equivalencies with Columbia College.</td>
<td></td>
</tr>
<tr>
<td><strong>General Education:</strong> Identifies whether or not a course fulfills a General Education requirement area specified in one of the three General Education patterns.</td>
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</table>
ADJU
(Administration of Justice)

For degrees and certificates earned in Administration of Justice, see the Behavioral and Social Sciences Division on page 116.

ADJU 145—COMMUNITY AGENCY SERVICE 1 Unit
Prerequisite: Satisfactory completion of ADJU 201
Concurrent enrollment: ADJU 145A, ADJU 145B, ADJU 145C, or ADJU 145D.
Analysis of field experiences of students concurrently enrolled in ADJU 145A, 145B, 145C, or 145D.
Class time is devoted to sharing and evaluating problems that develop, and ways of resolving them will be sought by class members. Lecture. Three maximum completions. Transfer: CSU (TCSU CJ 110)

ADJU 145 A, B, C, D—COMMUNITY AGENCY SERVICE FIELDWORK 1-4 UNITS
Prerequisite: Satisfactory completion of ADJU 201
Concurrent enrollment: ADJU 145
Supervised field experience in a variety of community social agencies. Weekly lab. 75 hours of work experience or 60 hours of volunteerism in a community service/social agency are required for every unit earned each semester. May be repeated up to 16 units in any combination. Transfer: CSU

ADJU 201—INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 Units
History and philosophy of the administration of justice in America. Overview of its sub-systems, including their role expectations and interrelationships. Overview of theories to account for crime, punishment and rehabilitation. Introduction to professional education, training and ethics in the administration of justice/field. Field trips may be required. Lecture. (A-F Only) Transfer: CSU, UC

ADJU 202—PRINCIPLES AND PROCEDURES OF THE JUSTICE SYSTEM 3 Units
Recommended for Success: Satisfactory completion of ADJU 201
Role and responsibilities of each Administration of Justice system segment; law enforcement, judicial, corrections. Past, present and future exposure to each sub-system procedure from initial entry to final disposition; relationship each segment maintains with its system members. Field trips may be required. Lecture. (A-F Only) Transfer: CSU

ADJU 203—CONCEPTS OF CRIMINAL LAW 3 Units
Recommended for Success: Satisfactory completion of ADJU 201 and 202.
Historical development, philosophy of law and constitutional provisions; definitions, classification of crime and their application to Administration of Justice system, legal research, case law, methodology and concepts of law as a social force. Field trips may be required. Lecture. (A-F Only) Transfer: CSU, UC

ADJU 204—LEGAL ASPECTS OF EVIDENCE 3 Units
Recommended for Success: Satisfactory completion of ADJU 202 and 203.
Origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting search and seizure, search and seizure; kinds and degrees of evidence and rules governing admissibility, judicial decisions interpreting individual rights and case studies. Field trips may be required. Lecture. (A-F Only) Transfer: CSU

ADJU 205—COMMUNITY RELATIONS 3 Units
Roles of Administration of Justice practitioners and agencies. Interrelationships and role expectations among the various agencies and the public. Principal emphasis on the professional image of Administration of Justice system and development of positive relationships between system members and the public. Lecture. (A-F Only) Transfer: CSU, UC

ADJU 206—MULTICULTURAL ISSUES WITHIN PUBLIC SAFETY 3 Units
Overview of multicultural concepts and issues; application of those concepts and issues to the four public safety disciplines: corrections, fire safety, hazardous materials, law enforcement. Identification of problems related to an increasingly diverse population. Examination of strategies to overcome these problems, particularly in relation to the maintenance of social order. Field trips required. Lecture. (A-F Only) Transfer: CSU

ADJU 210—COMMUNICATIONS IN CRIMINAL JUSTICE 3 Units

ADJU 212—CRIMINAL INVESTIGATION 3 Units
Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence; scientific aids; modus operandi; sources of information; interviews and interrogation; follow-up and case preparation. Lecture. Field trips may be required. (A-F Only) Transfer: CSU

ADJU 213—PATROL PROCEDURES 3 Units
Responsibilities, techniques and methods of police patrol. Field trips required. Lecture. (A-F Only)

ADJU 215—INTRODUCTION TO FIREARMS 1½ Units
Limitation on Enrollment: This course is restricted under California Penal Code Section 12021. Course requires handling and possessing of firearms. Convicted felons, persons addicted to any narcotic or convicted of any offense involving the violent use of a firearm are not allowed to enroll in the course based on Penal Code Section 12021. Prior to the use of a firearm in the course, each student must sign a declaration to the effect that he or she is not prohibited from such use by Penal Code Section 12021.
Historical evaluation, ownership evaluation, moral aspects, legal provisions, safety precautions, and restrictions covering the use of firearms; field demonstration and basic instruction in use of sidescars. Students must provide own ammunition. The instructor reserves the right to remove a student from the firing range due to a safety violation. Lecture/Laboratory. Three maximum completions. Field trips may be required. (A-F Only) Transfer: CSU

ADJU 216—ADVANCED FIREARMS AND RANGE APPLICATION 1½ Units
Prerequisites: Satisfactory completion of ADJU 215 or LENV 388.
Limitation on Enrollment: This course is restricted under California Penal Code Section 12021. Course requires handling and possessing firearms. Convicted felons, persons addicted to any narcotic or convicted of any offense involving the violent use of a firearm are not allowed to enroll in the course based on Penal Code Section 12021. Prior to use of a firearm in the course, each student must sign a declaration to the effect that he or she is not prohibited from such use by Penal Code Section 12021. A continuation of ADJU 215. In-depth review of legal aspects of firearms. Range firing of various weapons; usage of non-lethal weapons. Students must provide own ammunition, hearing protectors, and safety glasses. The instructor reserves the right to remove a student from the firing range due to a safety violation. Lecture/Laboratory. Three maximum completions. Field trips may be required. Materials fee required. Field trips may be required. (P/NP only) Transfer: CSU

ADJU 217—SUBSTANCE ABUSE 3 Units
Recommended for Success: Satisfactory completion of ADJU 201 and 202
Basic understanding of controlled substances, including identification, physiological effects, testing, and use detection, methods of control and investigation, applicable laws controlling use, treatment processes, and patient rights to confidentiality. Lecture. One completion allowed. (A-F Only) Transfer: CSU

ADJU 219—CORRECTIONS FIREARMS TRAINING 1½ Units
Prerequisite: Satisfactory completion of ADJU 215.
Limitation on Enrollment: This course is restricted under California Penal Code Section 12021. Convicted felons, persons addicted to any narcotic or convicted felons, persons addicted to any narcotic or convicted of any offense involving the violent use of a firearm are not allowed to enroll in the course.
Laws, policies, and ethical considerations with specialized training in weaponry used by correctional agencies. Range firing of rifles, shotguns, and handguns. Students must provide safety glasses and hearing protectors, and ammunition. Course is restricted under state and federal laws. Instructor reserves the right to remove a student from the firing range due to a safety violation. Students may repeat any combination of ADJU 215/216 or 219 for a maximum of 4 completions. Lecture/Laboratory. Field trips may be required. Materials fee required. (A-F Only) Transfer: CSU
**ADJU 222 — PROFILING TERRORISM**  
3 Units  
**Recommended for success: Satisfactory completion of ADJU 201.**  
Discusses the most significant theories by the best terrorist analysts in the world, while still focusing on the domestic and international threat of terrorism and the basic security issues surrounding terrorism today. Social-historical roots of terrorism, criminal, legal, and social response to terrorism, at-risk populations, prevention, and intervention strategies. Lecture. Two maximum completions.  
*(A-F Only)*  
**Transfer:** CSU

**ADJU 232 — JUVENILE JUSTICE PROCEDURES**  
3 Units  
**Transfer:** CSU

**ADJU 234 — CRIME CAUSATION**  
3 Units  
Principal theories commonly utilized in accounting for many known facts of criminality. Emphasis on implications and logic of certain theoretical positions common to much thinking and writing in the field. Lecture. *(A-F Only)*  
**Transfer:** CSU

**ADJU 235 — INTRODUCTION TO CORRECTIONS**  
3 Units  
Introduction to the correctional field. Covers historical development of correctional processes, current trends, and future directions of the correctional field. Examines local, state, and federal systems. Field trips may be required. Lecture. Applicable to the Associate Degree. *(A-F Only)*  
**Transfer:** CSU, UC, General Education: (MUC-GE-B)

**ADJU 236 — CORRECTIONAL LAW**  
3 Units  
Overview of the Constitutional provisions and definitions of laws relating to the corrections component of the Criminal Justice System. Emphasis on the legal aspects concerning adult offenders and correctional personnel with the Dept. of Corrections, juvenile offenders and correctional personnel with the Youth Authority and diversion agencies. The laws will entail Federal, State, and Local jurisdictions. Field trips required. Lecture. *(A-F Only)*  
**Transfer:** CSU

**ADJU 240 — DRUG AWARENESS**  
½ Unit  
Basic understanding of current drugs of abuse including psychological and physical symptomology, appearance, and social implications. Lecture. *(A-F Only)*  
**Transfer:** CSU

**ADJU 242 — DOMESTIC VIOLENCE PREVENTION**  
½ Unit  
**Transfer:** CSU

**ADJU 243 — DOMESTIC VIOLENCE CRISIS INTERVENTION**  
3 Units  
*Recommended for Success: Satisfactory completion of ADJU 201 or 242. Domestic violence as a pervasive and significant social issue requiring both prevention and intervention. Social-historical roots of family violence, criminal, legal, and social response to violence, at-risk populations, prevention, and intervention strategies. Lecture.* *(A-F Only)*  
**Transfer:** CSU

**ADJU 249 — AGRICULTURE INTERNSHIP**  
1, 2, 3, 4 Units  
*Designed for students who wish to combine classroom experience with an expansion of skills or knowledge acquired at a site of employment on a paid or volunteer basis. Work must directly relate to the student’s area of study. Maximum 4 units may be earned per semester. May be repeated to a maximum of 16 units: Work Experience credit. (Cooperative General Work Experience is included in the maximum.)*

**ADJU 351 — ELEMENTS OF SUPERVISION IN PUBLIC SAFETY**  
3 Units  
The nature and function of the supervisor’s role in business, industry, and government. The skills and techniques of effective management will be examined and applied in terms of attaining maximum results through the cooperative efforts of others. Lecture.

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**AG (Agriculture, Vocational & Technical)**

For degrees and certificates that can be earned in Agriculture: Vocational & Technical, see the Agriculture and Environmental Sciences Division on page 83.

Vocational Agriculture courses are designed to prepare for occupational entry into skilled or semi-professional fields of agriculture. Technical Agriculture courses are designed to prepare for occupational entry into the technical fields of agriculture.

**AG 100A, B — LEADERSHIP IN AGRICULTURE**  
1, 2 Units  
Lecture and supervised activities relating to student participation in agricultural competitions, judging contests, livestock exhibitions, recruitment programs, award and scholarship applications, and youth activity planning. Field trips required. Lecture/Leadership activities. Students may not exceed a total of 2 units in AG 100A only. *(A-F Only)*  
**Transfer:** CSU

**AG 115 — INTRODUCTION TO AGRICULTURAL EDUCATION AND CAREERS**  
1 Unit  
*Introduction to educational and agricultural employment opportunities. Includes portfolio and educational plan development and curriculum requirements that pertain to educational goals as they relate to agriculture majors. Assists students in setting goals and developing skills necessary for life-long success in obtaining, maintaining, and advancing in agriculture careers. Current events that impact agriculture and society will be discussed.* Lecture. *(A-F Only)*

**AG 120 — INTRODUCTION TO AGRICULTURE EDUCATION**  
2 Units  
*Overview of agricultural education and agricultural education programs from a teaching perspective including goals and purposes, kinds of classes, types of programs, and qualifications essential to successful agriculture teaching. Field trips may be required. Lecture plus participation in agricultural events, leadership activities and FFA involvement.* *(A-F Only)*

**AG 130 — AGRICULTURE EDUCATION EARLY FIELD EXPERIENCE**  
2 Units  
*Creates awareness of opportunities for prospective agriculture teachers through observation, participation in the field and through analysis of field experiences. Students will be expected to complete 20 hours of observation/field activities. The off-campus activities shall be supervised by the course instructor and shall take place in an approved agriculture department. Field trips required. Lecture/Laboratory. (A-F Only)*

**AG 249 — AGRICULTURE INTERNSHIP**  
4 Units  
*Designed for agriculture majors who wish to combine classroom experience with an expansion of skills or knowledge acquired at an internship site on a paid or volunteer basis. Internship experiences must directly relate to the student’s area of study. (P/NP Only)*

**AG 280 — AGRICULTURAL COMPUTATIONS**  
3 Units  
*Prerequisite: Satisfactory completion of MATH 20 or equivalent or qualification by MJC assessment process. Practical problems in production agriculture, agriculture mechanics, agriculture business, and natural resources. Includes problems in algebra, geometry, money and interest, equipment calibration, metrics and graphics. Lecture/Laboratory. (A-F Only)*

**AG 285 — AGRICULTURAL COMMUNICATIONS**  
3 Units  
*Formerly listed as AG 285 - Communications in Agriculture Methods of gathering and organizing data and writing reports. Communicating data. Lecture. (A-F Only)*

**AG 305 — SUPERVISION IN AGRICULTURE**  
2 Units  
*Training for student interns/unit managers of MJC agricultural farm facilities in the principles of supervision, demonstrating practical skill application, handling personnel problems, instructing new personnel on job performance, analyzing job efficiency and making management decisions. (Designed for West Campus Student Interns and Cooperative Association of States for Scholarships (CASS) International Students. Lec/Lab. May be completed up to four times. (A-F Only)*
AGEC 208—AGRICULTURAL BUSINESS MANAGEMENT 3 Units

Principles of agricultural management and measures of earnings in determining production efficiency; property reports, government regulations, agricultural finance, development of a management plan for a given agribusiness with application of the above principles; term report and field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU

AGEC 225—AGRICULTURE COMPUTER APPLICATIONS 3 Units

Computer use in the agribusiness work place, with emphasis on using software to solve agribusiness accounting problems, recordkeeping, creating. Computer applications including word processing, spreadsheets, databases, and presentation managers. Researching through the Internet and World Wide Web, telecommunications, and other agribusiness software. Lecture. (A-F Only) Transfer: CSU, UC General Education: (MJC-GE:D2)

AGEC 280—AGRICULTURAL SALES AND SERVICE 3 Units

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete three agriculture courses (preferably two or more agriculture production courses and one or more agribusiness courses).

Introduction to the sales and service professions with emphasis on, but not limited to, the agribusiness sector. Provides both theoretical background and experiential exercises on a variety of sales and service facets including: the sales industry, identifying and understanding personalities, motivating people, sales presentations, prospecting, sales management, and advertising and promotion. Designed to prepare for employment or augment a current sales job. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

AGGE 145—PARLIAMENTARY PROCEDURE 1 Unit

Also offered as SCPD 145.

Introduction to Parliamentary Procedure. Preparing for and participating in meetings as a member, officer, and chairperson. Rank and use of motions. Two completions allowed. Lecture. (A-F or P/NP) Transfer: CSU

AGGE 146—AGRICULTURE, ENVIRONMENT AND SOCIETY 3 Units

The sociology of agriculture presented through an examination of relationships between societies and their environments, economics, and agriculture. Emphasis on the analysis of agriculture's use of technology and the corresponding impact on the environment, economy and society. Field trips may be required. Lecture. Materials fee may be required. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D7)
AGM 191X,A,B—AGRICULTURE FIELD STUDIES  ½-2 Units
Examination of agriculture principles and methods through extended field studies at selected sites in the United States and abroad. Gain knowledge of and appreciation for the value of agriculture and agriculture education in other states and countries as a means of developing extended agriculture relationships. Course is repeatable, four completions allowed. Field trips are required. Lecture (A-F or P/NP). Transfer: CSU.

AGGE 320—EVALUATION OF AGRICULTURAL PRODUCTS  1 Unit
Evaluation skills in selecting animal, plant, mechanical, and business products. Four maximum completions. Field trips required. Lecture. Materials fee required. (A-F Only.)

AGM (Agricultural Mechanics)
Courses with an asterisk are those in which safety glasses* are required per state law.

AGM 50—PREPARATION FOR MECHANICAL TECHNOLOGY*  3 Units
Preparation in woodworking, cold metal, forging, plumbing and welding as related to farm maintenance and repair. Designed for agricultural students who need development in basic mechanical skills. Field trips may be required. Lecture/Laboratory. Materials fee required.

AGM 200—INTRODUCTION TO MECHANICAL TECHNOLOGY*  3 Units
Also offered as INTEC 200.
Basics in woodworking, cold metal, forging, plumbing and welding as related to farm maintenance and repair. Designed for agricultural students who need development in basic mechanical skills. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU.

AGM 210—AGRICULTURAL WELDING*  3 Units
Introduction and basic instruction in various welding and cutting methods to include: SMAW, GMAW, OAW, GTAW. Coursework to include machine selection and setup. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU.

AGM 211—ADVANCED AGRICULTURAL WELDING*  3 Units
Prerequisite: Satisfactory completion of AGM 210
Advanced welding and other metallurgical techniques such as pipe fitting, hard facing, MIG (GMAW) and TIG (GTAW) welding on aluminum and stainless steel. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU.

AGM 212—MECHANICAL SYSTEMS DESIGN & EVALUATION  1 Unit
Introduction to elements of agriculture mechanical system design and evaluation. Mechanical systems include fluid power and mechanical drive systems, structural design as well as development of evaluation procedures to ensure optimum performance. Introduction to computer evaluation and 3D modeling software will also be included. May be completed up to 2 times. Lecture/Laboratory. (A-F Only) Applicable to the Associate Degree. Transfer: CSU.

AGM 213—MECHANICAL SYSTEMS DESIGN & EVALUATION  2 3 Units
Advanced elements of agriculture mechanical system design and evaluation. Emphasis will be placed on mechanical and electronic data acquisition and evaluation of performance. The use of data logging equipment and computer analysis will be included. May be completed up to 2 times. Lecture/Laboratory. (A-F Only) Transfer: CSU.

AGM 214—EQUIPMENT SERVICE AND SAFETY  1 Unit
Safe tractor, forklift, and machinery operation, service and key safety practices found in shops. Safe handling of chemicals used in farming and fire safety. A job skills course for students involved in farming practices on college property. Supervised field operation and field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU.

AGM 215—MACHINERY MANAGEMENT  3 Units
Designed for future and current equipment managers/owners to understand the selection, maintenance, and replacement of tractors and machinery used in the agriculture, on-highway truck, and heavy equipment industries. Assessing needs and developing sound management practices for modern equipment operators. A focus on practical knowledge and “hands-on” skills is a priority. Materials fee required. Field trips required. (A-F or P/NP) Lecture/Lab. Transfer: CSU.

AGM 220—INDUSTRIAL/AGRICULTURAL MACHINERY*  3 Units
Recommended for Success: Satisfactory completion of AG 280 or other math equivalent.
Operation, selection and care of industrial and agricultural machinery common to this area. The calibration, repair, adjustment and hitching of machinery. Principles of power and its transmission related to machinery. Semester notebook required. Field trips required. Lecture/Lab. (A-F Only) Transfer: CSU.

AGM 221—EQUIPMENT DIAGNOSIS AND REPAIR  3 Units
Emphasis will be placed on modern diagnostic techniques and equipment repair used in the agriculture, on-highway truck, and heavy equipment industries. Designed for the diesel equipment technician who wants to become more proficient in advanced diesel engine diagnosis and repair. May be completed up to two times. Materials fee required. Lec/Lab. (A-F or P/NP) Transfer: CSU.

AGM 222—COMPACT POWER EQUIPMENT REPAIR  1 Unit
Emphasis placed on advancement of skills learned in Small Engine Repair course. Students will gain practical and “hands-on” experience in compact equipment repair. May be completed up to two times. Materials fee required. Lec/Lab. (A-F Only) Transfer: CSU.

AGM 225—PRINCIPLES OF ELECTRICAL WIRING  3 Units
Also offered as INTEC 225.
Fundamental principles, and applications of electrical energy used on residential, industrial and agricultural situations including designing, planning and implementation of electrical circuits. Field trips required. Materials fee required. (A-F Only) Transfer: CSU.

AGM 230—FIELD SURVEYING  2 Units
Recommended for success: Satisfactory completion of MATH 70 or AG 280.
Also offered as ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. Field trips required. (A-F Only) Transfer: CSU.

AGM 235—IRRIGATION AND DRAINAGE  3 Units
Irrigation and drainage problems relating to pumps, motors, sprinkler systems, structures, pipelines, ditches and wells; computation of costs and measurement of water; water law, basic principles of plant-soil-moisture relations and water movement in soil. Field laboratories required. Lecture/Laboratory. Field trips required. (A-F Only) Transfer: CSU.

AGM 240—TRUCK AND TRACTOR POWER TRAINS  3 Units
Operation and repair of truck and tractor transmissions and power transfer systems. Topics to include diagnostics and repair of transmissions, clutches and differentials. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU.

AGM 241—DIESEL ENGINE PRINCIPLES  3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to complete AGM/AUITEC 289.
Also offered as AUITEC 241.
The operation and repair of modern diesel engines. Principles and theories are studied by running, testing, diagnosing, disassembling and reassembling components, systems, and engines. Field trips required. Materials fee required. Lec/Lab. (A-F or P/NP) Transfer: CSU.

AGM 242—DIESEL ENGINE OVERHAUL  3 Units
Principles of design and construction of heavy duty engines used in the agriculture, construction, and trucking industries. Principles and theories are studied by running, testing, diagnosis, disassembling, and reassembling components, systems, and engines. Lec/Lab. (A-F or P/NP) Transfer: CSU.
AGM 243 — HEAVY MACHINERY ELECTRICAL SYSTEMS  
3 Units  
Recommended for Success: Satisfactory completion of AGM 241 or AUTC 241  
Designed for the entry level heavy duty mechanic interested in heavy machinery and/or on-highway truck. A strong understanding of basic and advanced electrical systems of heavy machinery will be generated. Electrical system troubleshooting, diagnosis and repair with the aid of technical information and electrical test equipment will be the focus. The class will also provide necessary electrical theory and background review for more advanced electrical courses. Applicable to the Associate Degree. Materials fee required. (A-F Only) Transfer: CSU

AGM 245 — DIESEL ENGINE FUEL SYSTEMS AND DIAGNOSIS  
3 Units  
The study of common types of diesel fuel injection systems. Design and theory of operation of distributor type, in-line type, as well as electronically controlled systems. Testing and diagnostic procedures for various fuel systems is a major component of the course. Service and adjustments of injectors, nozzles, and governors will also be covered. Field trips required. (A-F Only) Transfer: CSU

AGM 251 — FARM CONSTRUCTION AND MATERIALS  
4 Units  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete AGM 200 and AGM 210.  
Types, costs and characteristics of construction materials, their use in farm equipment and buildings. Structural requirements, cost factors, safe loads, animal and equipment requirements, operation and labor efficiency, adaptability to the community. Designing and building projects in the shop and group field work. Field trips required. (A-F Only) Transfer: CSU

AGM 252 — FARM CONSTRUCTION ADVANCED LAB  
2 Units  
Prerequisite: Satisfactory completion of AGM 251  
Analysis of types, costs and characteristics of construction materials, their use in farm equipment and buildings. Structural requirements, cost factors, safe loads, operation and labor efficiency and adaptability to the environment. Designing and building projects in the shop and group field trips. Field trips required. (A-F Only) Transfer: CSU

AGM 262 — HYDRAULICS/PNEUMATICS  
3 Units  
Also offered as INTEC 262.  
Formerly listed as AGM 362.  
Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems. Field trips may be required. Two maximum completions. Transfer: CSU

AGM 280 — MOBILE MACHINERY HYDRAULIC SYSTEMS  
3 Units  
Recommended for Success: Satisfactory completion of AG 280 and (AGM 215 or 220)  
Fundamental principles and practices of hydraulic circuits as applied to mobile hydraulic systems in the Agriculture, Heavy Machinery, and Off-Highway truck industries. Emphasis in system and component design and operation as applied to diagnosis and repair of hydraulic systems. Field trips may be required. Lec/Lab. Materials Fee Required. (A-F or P/NP) Transfer: CSU

AGM 289 — PRINCIPLES OF POWER MECHANICS/  
3 Units  
SMALL ENGINES  
Formerly listed as: AGM/AUTEC 389  
Also offered as AUTC 289.  
Introduction to the operation, construction, maintenance, repair and adjustments of two and four-stroke engines. Designed for persons without prior experience in engine repair. Experienced technicians will also benefit. Materials fee required. (A-F Only) Transfer: CSU

AGM 310 — AGRICULTURAL WELDING  
2 Units  
Basic welding techniques and theory instruction in oxyacetylene welding and cutting, shield metal arc welding, and flate and vertical fusion welding. Introduction to MIG welding, brazing, and heating will also be covered as well as welding safety. Field trips required. (P/NP Only)

ANSC  (Animal Science)

ANSC 200 — INTRODUCTION TO ANIMAL SCIENCE  
3 Units  
A scientific approach to the livestock industry encompassing aspects of animal anatomy, physiology, nutrition, genetics, and epidemiology. Emphasis on the origin, characteristics, adaptations and contributions of livestock to the modern agricultural industry. Field trips may be required. Lecture. (A-F Only) Transfer: CSU, UC

ANSC 201 — BEEF CATTLE SCIENCE  
3 Units  
A study of the principles and practices of purebred and commercial cattle production throughout California, the U.S. and the world. Emphasis will be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance as applied to beef cattle. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 202 — SWINE SCIENCE  
3 Units  
A study of the principles and practices of purebred and commercial pork production throughout California, the U.S., and the world. Emphasis to be placed on the importance of breeds, breeding principles, selection, nutrition, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 203 — SHEEP SCIENCE  
3 Units  
A survey of the sheep industry including management of commercial, purebred and small flocks; selecting, feeding, breeding and basic care of ewes and lambs plus marketing of lambs and wool. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 207 — EQUINE SCIENCE  
3 Units  
A survey of the equine industry; selection, feeding, breeding, facilities, handling and health management will be emphasized to ensure scientifically-based management decisions. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 50 — PREPARATORY ANIMAL SCIENCES  
3 Units  
Preparation for veterinary technology courses. Topics include: anatomy and physiology, nutrition, pharmacology, common diseases and disorders, genetics and heredity, and career opportunities. Lecture. (A-F Only)
ANSC 208 — CARE AND HANDLING OF HORSES AND TACK 3 Units
Basic care of the horse and equipment. Types of equipment. Horse handling skills including training and riding. Student is expected to provide own horse. Field trips required. (A-F Only) Transfer: CSU, UC

ANSC 209 — EQUINE BREEDING AND REPRODUCTION 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ANSC 207.

An advanced level course designed for students interested in learning more about equine reproduction and management. Field trips may be required. (A-F Only) Transfer: CSU, UC

ANSC 210 — LIVESTOCK SELECTION AND EVALUATION 3 Units
Detailed analysis of various visual and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value. Written and oral summaries of evaluation will be required. Specific reference will be made to performance data as well as live animal observation. Oral interpretation of these evaluative criteria. Formal reasoning presentations required. Field trips required. (A-F Only) Transfer: CSU, UC

ANSC 211 — INTRODUCTION TO MEAT SCIENCE 3 Units
An introductory course to the meat industry with a special emphasis on meat products and value-added meat processing techniques. Concepts on food safety and sanitation, grading and inspection along with preservation and marketing strategies to meet current consumer demands. Field trips required. (A-F Only) Transfer: CSU, UC

ANSC 212 — LIVESTOCK SELECTION & EVALUATION 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ANSC 210.

Advanced study of animal conformation as related to its various functions. Evaluation of beef, sheep and swine species using performance and carcass data as well as live animal observation. Oral interpretation of these evaluative criteria. Formal reasoning presentations required. Field trips required. Two maximum completions. Lecture/Laboratory/Other. (A-F Only) Transfer: CSU, UC

ANSC 214 — LIVESTOCK FEEDING AND NUTRITION 3 Units
The fundamentals of digestion and absorption in both ruminants and nonruminants are discussed. The nutritive value of feeds as they relate to the formulation of livestock rations will be emphasized, including by-product feeding. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 215 — ANIMAL HEALTH AND SANITATION 3 Units
Common livestock diseases and fundamentals of immunity. Includes coverage of the livestock worker's role in promoting animal health and the foundation of disease control programs. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 216 — LIVESTOCK BREEDING AND SELECTION 3 Units
Anatomy and physiology of male and female reproductive systems, endocrine system, and problems affecting reproductive efficiency, fertilization, gestation, and parturition. Principles of heredity as applied to livestock breeding and improvement; systems of breeding; environmental factors affecting reproduction and performance. Livestock selection programs based on performance and progeny. Field laboratories including some on Saturdays required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 217 — ADVANCED BREEDING AND ARTIFICIAL INSEMINATION 4 Units
Recommended for Success: Satisfactory completion of ANSC 201 and 220 and (ANSC 216 or 226)

Advanced study and practical application of breeding principles and artificial insemination of farm animals; the collection, evaluation, and handling of semen, nutritional level, and sanitation practices affecting reproductive efficiency, public relations, and the responsibilities of the technician and the management. Field trips required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU, UC

ANSC 220 — DAIRY INDUSTRY/DAIRY SCIENCE 3 Units
History, development and projections of the dairy industry. General information on the economics of dairying, facts, trends, selection, culling, fitting, showing, judging, pedigrees, feeding and basic management skills; employment opportunities and requirements. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 221 — DAIRY CATTLE SELECTION AND EVALUATION 3 Units
Selection of dairy cattle on type conformation and the correlation between type and production. Pedigree evaluation, animal analysis, linear classification and body condition scoring. Written and oral evaluation on selection. Field trips required. Two maximum completions. Lecture/Laboratory. Other. (A-F Only) Transfer: CSU, UC

ANSC 222 — MILK PRODUCTION AND TECHNOLOGY 3 Units
Milk and milk product consumption and the economics of milk production. Discusses the mammary system anatomy, the physiology of milk secretion, the composition and the properties of milk, including factors of production. Evaluation of milking parlors and equipment, systems, analysis and operation is also included. Milk testing, sanitation, quality control, udder health and treatment as well as dairy mathematics. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 224 — DAIRY FEEDS AND FEEDING 3 Units
Fundamentals of digestion and absorption in ruminants. The nutritive value of feeds as they relate to the formulation of dairy rations will be emphasized, including by-product feeding. Term project and field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 226 — DAIRY BREEDING AND SELECTION 3 Units
The study of basic genetic principles with the study of the anatomical and physiological aspects of reproduction as they relate primarily to the bovine. Genetic principles to be emphasized include basic inheritance, selection techniques, mating systems, heterosis, and performance evaluation. Reproductive aspect to include endocrinology, estrous cycles, mating behaviors, gametogenesis, conception, gestation, parturition, and maternal behaviors. Artificial insemination, embryo manipulation, and current innovations in reproductive biotechnology will also be examined. Field trips are required. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 227 — ADVANCED DAIRY CATTLE SELECTION AND EVALUATION
Prerequisite: Satisfactory completion of ANSC 221

Advanced study of dairy conformation as related to the function of milk production. Evaluation of dairy cattle using production data, pedigrees and live animal evaluation. Particular emphasis will be placed on linear classification and selective mating. Oral interpretation of these evaluative criteria and formal reasoning presentations will be required. Evaluation of milk and milk products will be required as well. Field trips required. Two maximum completions. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 228 — DAIRY MANAGEMENT 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ANSC 220 and 224 and AGEC 200.

Economics of dairying; milk production and marketing and their relationship to income; computing production costs; analyzing dairy enterprises; business planning; farm selection; management problems relating to feeding, labor, replacements, breeding, work simplification and record keeping. Term problem and field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 230 — POULTRY SCIENCE 3 Units
A study of the principles and practices of commercial poultry production. Emphasis to be placed on poultry nutrition, reproduction, environmental management, health, marketing and record keeping to ensure scientifically-based management decisions and consumer product acceptance. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 232 — AVIAN PRACTICES 3 Units
Practices in avian management including breeders, fryers, and layers; incubating, brooding and rearing of chicks. Processing and marketing of various avian products. Specific work with game birds, and non-commercial species of fowl. Field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

ANSC 234 — POULTRY FEEDING 3 Units
Economics of poultry feeding. Composition of feeds, nutritional requirements, feed formulation for poultry; computer-assisted feed formulation, and proper feeding techniques. Field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU
ANSC 235—POULTRY DISEASES AND HOUSING 3 Units
Anatomy and physiology of poultry; diagnosis, treatment, prevention and control of disease; sanitation; types of housing and equipment; planning housing, and equipment needs; vaccination schedules. Field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 236—POULTRY BREEDING AND SELECTION 3 Units
Principles of poultry breeding, record analysis, calling and selection of poultry, incubation, hatching and grading of eggs. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 240—BEEF FITTING AND SHOWING 2 Units
Principles of selection, feeding, and presentation of beef animals for show. Field trips required. Three maximum completions. Lecture/Laboratory/Other. (A-F Only) Transfer: CSU

ANSC 241—SHEEP FITTING AND SHOWING 2 Units
Principles of selection, feeding, and presentation of sheep for show. Three maximum completions. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 242—SWINE FITTING AND SHOWING 2 Units
Principles of selection, feeding, and presentation of swine for show. Field trips required. Three maximum completions. Lecture/Laboratory/Other. (A-F Only) Transfer: CSU

ANSC 243—EQUINE FITTING AND SHOWING 2 Units
Formerly titled "Horse Fitting and Showing"
Principles of selection, feeding, and presentation of horses for show. Field trips required. Three maximum completions. Lecture/Lab. (A-F Only) Transfer: CSU

ANSC 244—DAIRY FITTING & SHOWING 2 Units
Principles of selection, feeding, and presentation of dairy animals for show. Field trips may be required. Three maximum completions. Lecture/Lab. (A-F Only) Transfer: CSU

ANSC 245—MEAT GOAT FITTING AND SHOWING 2 Units
Principles of selection, feeding, and presentation of meat goats for show. Field trips may be required. Three maximum completions. Lecture/Lab. (A-F Only) Transfer: CSU

ANSC 250—VETERINARY PHYSIOLOGY, ANATOMY & TERMINOLOGY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
Commonly used terminology and biological concepts used in veterinary medicine. Includes study of basic normal anatomy and physiology (in both large and small animals) in a body systems format, along with related vocabulary and spelling. Commonly used veterinary acronyms and abbreviations are woven throughout the course where relevant. Transfer: CSU

ANSC 251—VETERINARY PHARMACY PROCEDURES 2 Units
Recommended for Success: Satisfactory completion of ENGL 50
Includes discussion of veterinary pharmacology and common items dispensed with emphasis on proper labeling and dispensing instructions. Lecture/Laboratory. Field trips required. Transfer: CSU

ANSC 252—VETERINARY EQUIPMENT: OPERATION, INSTRUMENTATION, AND SAFETY 3 Units
Recommended for Success: Satisfactory completion of ENGL 50
Customer service, medical communication skills, office organization, scheduling, emergency recognition and management, stress management, preventative health programs, and medical record-keeping. Field trips required. Lecture/Laboratory. Transfer: CSU

ANSC 253—VETERINARY LABORATORY PROCEDURES 1 Unit
Introduction to manual and automated veterinary lab techniques and procedures, including work with blood, urine, fecal and skin samples. (A-F or P/NP) One completion allowed. Lecture. Transfer: CSU

ANSC 254—VETERINARY MEDICAL OFFICE PROCEDURES 2 Units
Introduction to customer service, medical communication skills, office organization, scheduling, emergency recognition and management, stress management, preventative health programs, and medical record-keeping. (A-F Only) Transfer: CSU

ANSC 255—PREPARATION FOR SURGICAL AND DENTAL ASSISTANCE 3 Units
Recommended for Success: Satisfactory completion of ENGL 50
Preparation for surgery, surgery assistance, surgical and dental instruments and packs, anesthesia induction, monitoring and anesthetic machine maintenance, anatomy of the mouth and dental arcade, dental prophylaxis and extractions. Field trips required. Lecture/Laboratory. Transfer: CSU

ANSC 256—VETERINARY ASSISTANCE AND NURSING: EMERGENCY PROCEDURES 1 Unit
Emphasis on emergency procedures, monitoring vital signs, taking steps to stabilize patients. Basic nutritional requirements for pets, species requirements, nutritional disorders, feeding methods. Basic animal behavior, detecting signs of stress, and identifying causes of behavioral problems. Field trips required. Lecture/Laboratory. Transfer: CSU

ANSC 257—VETERINARY ASSISTANCE AND NURSING: ANIMAL HANDLING 2 Units
Basic veterinary nursing procedures including animal restraint, administration of medication, catheterization, vaccination techniques, bathing, bandaging, and performing minor medical procedures. (A-F Only) Transfer: CSU

ANSC 260—ADVANCED HORSEMANSHIP 3 Units
Introduction to riding, saddling, grooming and bridling. Students will acquire basic knowledge of equipment and safety procedures. Course topics include use of riding aids and transitions. May be completed up to 4 times. (A-F Only) Transfer: CSU

ANSC 265—INTRODUCTION TO COLT TRAINING 3 Units
Basic principles involved in handling and training the young horse. Course includes groundwork, trailering, starting a colt, advancing the green horse, and problem-solving. (A-F Only) Transfer: CSU

ANSC 269—PREPARATION FOR SURGICAL AND DENTAL ASSISTANCE 3 Units
Recommended for Success: Satisfactory completion of ENGL 50
Preparation for surgery, surgery assistance, surgical and dental instruments and packs, anesthesia induction, monitoring and anesthetic machine maintenance, anatomy of the mouth and dental arcade, dental prophylaxis and extractions. Field trips required. Lecture/Laboratory. Transfer: CSU

ANSC 279—SMALL ANIMAL MEDICINE AND BEHAVIOR 2 Units
Formerly listed as ANSC 377 and ANSC 378.
Basic introductory course in normal animal behavior of dogs and cats. The diagnosis and treatment of some of the most common pet behavior problems. Includes history of diseases and parasites in the area; management techniques to prevent diseases and parasites, state and federal regulatory services. Lecture. (A-F Only).

ANTHR (Anthropology)

ANTHR 101—PHYSICAL ANTHROPOLOGY 3 Units
Introduction to human evolution. The evidence for human biological and behavioral adaptations is examined. Issues and topics will include the principles of genetics and evolution, human variation, comparative primate anatomy/behavior and an assessment of the human fossil record. Field trips may be required. Lecture. Transfer: CSU, LUC (CC ANTHR 1) (TCSU ANTH 110) General Education: (AIC-GE; A) (CSU-GE; B2 OR D1) (IGETC; SB)
ANTHR 102—CULTURAL ANTHROPOLOGY  3 Units
Introduction to the methods, theories and insights of cultural anthropology and the application of these to life in a multicultural society. Topics include, but are not limited to: the nature of culture, cross-cultural comparative patterns in the areas of subsistence patterns, economics, religion, kinship, gender, language, political organization. Recommended for people who travel internationally. Field trips may be required. Lecture. Transfer: CSU, UC (CC ANTHR 2) (TSU ANTH 120) General Education: (MU-GE: B) (CSU-GE: D1) (IGETC: 4)

ANTHR 104—LANGUAGE, CULTURE AND COMMUNICATION  3 Units
An introduction to the anthropological study of language. Topics include a survey of linguistics, including phonetics, phonology, morphology, syntax and semantics; the ethography of communication; classification and cultural meaning; the evolution of language, and historical linguistics. (A-F or P/NP). Applicable to the Associate Degree. Transfer: CSU, UC. (TSU ANTH 130) General Education: (MC-GE: B,C) (CSU-GE: C2,D1) (IGETC: 3B, 4A)

ANTHR 105—PHYSICAL ANTHROPOLOGY LABORATORY  1 Unit
Corequisite: Satisfactory completion of or concurrent enrollment in ANTHR 101. Laboratory investigation of methods and techniques of human evolution and variation, including use of the scientific method, anthropometrics, and an analysis of the development and functional morphology of primates. Lines of evidence examined will include the study of population genetics, comparative anatomy and behavior of primates, forensic anthropology, human fossils and their reconstruction. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC (TSU ANTH 110) (MC-GE: A) (CSU-GE: B3) (IGETC: SB)

ANTHR 107—FORENSIC ANTHROPOLOGY INTRODUCTION  3 Units
Introduction to forensic anthropology as an applied field of physical anthropology; the methods of solving crimes with anthropological data and applying techniques designed for the analysis of human skeletal remains (personal identification, the determination of population, cause of death, DNA analysis, and issues of collection of physical evidence). Interaction between anthropologists and law enforcement agencies and human rights issues. (A-F or P/NP). Transfer: CSU.

ANTHR 130—ARCHAEOLOGY AND CULTURAL PREHISTORY  3 Units
An introduction to anthropological archaeology including concepts, theories and methods employed by archaeologists in reconstructing past life ways of humans. Topics include history and interdisciplinary nature of archaeological research; data acquisition, analysis and interpretation with a discussion of applicable data and models; cultural resource management; selected cultural sequences. Field trips may be required. Lecture. Transfer: CSU, UC (CC ANTH 10) (TSU ANTH 150) General Education: (CSU-GE: D1) (IGETC: 4)

ANTHR 140—MAGIC, WITCHCRAFT & RELIGION  3 Units
A cross-cultural study of the forms and functions of supernatural beliefs and associated rituals around the world. Emphasis on analyzing beliefs and rituals within their cultural contexts, and on broad comparison, to derive insight into the place of belief and ritual in human life. Lecture. Transfer: CSU, UC General Education: (CSU-GE: C1) (CSU-GE: D1) (IGETC-4A)

ANTHR 150—NATIVE PEOPLE OF NORTH AMERICA  3 Units
Introductory survey of the origins and varied adaptations made by the aboriginal cultures north of Mexico. Protohistoric and historic periods are emphasized. Special consideration of the aboriginal cultures of California. Emphasis on the techniques of data collection, analysis and interpretation. Field trips may be required. Lecture. Not offered every semester. Transfer: CSU, UC (CC ANTH 15) General Education: (CSU-GE: D1) (IGETC-4)

ANTHR 160—FAMILIES IN SOUTHEAST ASIAN CULTURES  1 Unit
Also offered as FAMLF 160. A survey of basic value concepts of Southeast Asian cultures; their origin, and resulting impact on family structure, child rearing, marriage practices, religion, folk medicine and education. Overview of the interplay between Southeast Asian social and cultural values and their counterparts in American society. Continuity and change in the Southeast Asian family. Lecture. (Spring) Transfer: CSU

ANTHR 161—FAMILIES IN LATIN AMERICAN CULTURES  1 Unit
Also offered as FAMLF 161. A survey of basic value concepts of Latin American cultures; their origin, and resulting impact on family structure, child rearing, marriage practices, religion, folk medicine and education. Overview of the interplay between Latin American social and cultural values and their counterparts in American society. Continuity and change in the Latin American family. Lecture. (Fall) Transfer: CSU

ANTHR 174—ANTHROPOLOGY SUMMER FIELD STUDIES  3 Units
Recommended for Success: Satisfactory completion of ANTHR 102, ANTHR 130, or ANTHR 150 Application of principles of anthropology and archaeology through extended field studies at selected sites in the western United States. Skills developed in cultural field studies, ethnographic data collection, archaeological artifact and site identification. Requires ability to work and study under rigorous conditions. Field trips required. Maximum two completions. Materials fee required. (Summer). Lecture. (A-F or P/NP) Transfer: CSU.

AP (Anatomy & Physiology)

AP 50—ELEMENTARY HUMAN ANATOMY-PHYSIOLOGY  3 Units
Introduction to the structure and function of the human body; basic terminology, cell biology, and the organ systems. Designed as a preliminary course for Allied Health students, but opened to all students. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

AP 150—INTEGRATIVE ANATOMY AND PHYSIOLOGY  5 Units
Prerequisites: Satisfactory completion of AP 50 or BIO 101 or BIO 111 An intense one-semester study of the general structure and function of the human body with an emphasis on integrative functions of the organ systems. Includes organs, tissue and cellular inter-relationships; cellular communication; blood movement and hemostasis; fluid balance, respiration and digestion, and reproduction. Intended for students entering health professions that accept a one-semester course. One completion allowed. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

ARCH (Architecture)

ARCH 100—INTRODUCTION TO ENGINEERING  1 Unit
AND ARCHITECTURE
Also offered as ENGR 100. Introduction to the vocational and academic opportunities at MJC with special emphasis on engineering, architecture and related technologies. Topics include models of student success, characteristics of the professions, development of educational plans, Associate Degree Requirements, importance of teamwork, and self-assessment. Activities include field trips, practice labs, and presentations by MJC counselors and practicing engineers and architects. Lecture. Materials fee may be required. (Fall) (MJC Guidance) Transfer: CSU, UC

ARCH 106—MATERIALS OF CONSTRUCTION  2 Units
Recommended for Success: Concurrent enrollment in ARCH 107 Use and application of construction processes and materials pertaining to architecture. Field trips may be required. Lecture. Materials fee may be required. (Fall) Transfer: CSU

ARCH 107—MATERIALS OF CONSTRUCTION LABORATORY  1 Unit
Recommended for Success: Concurrent enrollment in or completion of ARCH 106 or IGETC 250. Observation and testing of mechanical properties of steel, concrete, and wood, laboratory and field exercises with basic construction methods using wood and concrete; field trips to construction sites, materials manufacturing and processing plants. Laboratory. Materials fee may be required. (Spring) Transfer: CSU

ARCH 117—HISTORY OF ARCHITECTURE  3 Units
The development of architecture, its philosophies and conditions from Prehistoric through Egyptian, Greek, Roman. Early Christian, Medieval, Romanesque-Gothic and Pre-Columbian. Lecture. Materials fee may be required. (Fall) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)
ARCH 118—HISTORY OF ARCHITECTURE 2 3 Units
The development of architecture, its philosophies and conditions from the Renaissance through the Industrial Revolution, the Modern Movement and including the Twentieth Century. ARCH 117 is not a prerequisite. Lecture. Materials fee may be required. (Spring) Transfer: CSU, UC. General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ARCH 121—BEGINNING GRAPHICS AND DESIGN 1 4 Units
Introduction to the graphic and computer production of architectural drawings pertaining to freehand, orthographic, axonometric and perspective drawings. Basic principles and concepts of two- and three-dimensional design. Field trips may be required. Lecture/Laboratory. Materials fee may be required. (Fall). Transfer: CSU, UC.

ARCH 122—BEGINNING GRAPHICS AND DESIGN 2 4 Units
Prerequisite: Satisfactory completion of ARCH 121
Continuation of ARCH 121. Extended development of the content in ARCH 121 plus the introduction of the graphic methods and skills to communicate and represent conceptual ideas, analysis, and design concepts. Field trips may be required. Lecture/Laboratory. Materials fee may be required. (Spring) Transfer: CSU, UC.

ARCH 131—ARCHITECTURAL DRAFTING 1 4 Units
Recommended for Success: Previous drafting experience.
Techniques and skills of drafting, introduction to building codes and construction methods, and the construction documents used to communicate the light-wood frame building process. Introduction to computer-assisted drafting in architectural applications. Field trips may be required. Lecture/Laboratory. Materials fee may be required. Transfer: CSU.

ARCH 132—ARCHITECTURAL DRAFTING 2 3 Units
Prerequisite: Satisfactory completion of ARCH 131
Continuation of ARCH 131. Further development of office and drafting practices, contract document preparation, and construction processes with emphasis on heavy timber construction. Introduction to computer-assisted drafting in more complex architectural applications. Field trips may be required. Lecture/Laboratory. (Spring) Transfer: CSU.

ARCH 152—ARCHITECTURAL DESIGN 1 5 Units
Prerequisites: Satisfactory completion of ARCH 122
Fundamentals of design concepts focusing on architectural form, function, space, and structure. Application of problem solving methods as applied to the relationship of man, building, and environmental concerns. Field trips required. Lecture/Laboratory. Materials fee may be required. (Fall) Transfer: CSU.

ARCH 153—ARCHITECTURAL DESIGN 2 5 Units
Prerequisite: Satisfactory completion of ARCH 152
Continuation of ARCH 152. Explorations in architectural design within an environmental context. Consideration of projects dealing with buildings, site, climate, and structural issues and their interaction with aesthetic and functional concerns. Field trips required. Lecture/Laboratory. Materials fee may be required. (Spring) Transfer: CSU.

ARCH 331—BASIC ARCHITECTURAL DRAFTING 1 2 Units
Introduction to architectural drafting and construction techniques for the nonprofessional with major emphasis on residential drawing and design. Topics include: a basic understanding of drafting skills, architectural nomenclature, design presentations, building materials, and a simple understanding of structure. Lecture/Laboratory.

ART 102—INTRODUCTION TO COMPUTER GRAPHICS 3 Units
Also offered as CMPGR 202.
Introduction to computer graphics using various applications and tools. Topics explored include but are not limited to: original image creation, photographic editing, scanning, printing, two-dimensional animation, sound, digitizing pens, mouse, and digital camera. Field trips required. Materials fee required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC. General Education: (CSU-GE: C1)

ART 103—APPLIED COMPUTER GRAPHICS 3 Units
Recommended for Success: Satisfactory completion of ART 102/CMPGR 202 Also offered as CMPGR 213.
Formerly listed as Microcomputer Graphics.
Concepts and techniques in computer graphics as related to fine and applied art applications. Field trips required. Materials fee required. Lecture/Laboratory. (MJC Activities) Transfer: CSU.

ART 108—CERAMICS 1 3 Units
Prerequisite: Satisfactory completion of ART 109
Techniques of elementary clay construction and ornamentation, introduction to throwing techniques. Trustee receipt required to purchase course materials as needed. Field trips may be required. Materials fee required. One completion allowed. Lecture/Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC (CC ART 31)

ART 109—CERAMICS 2 3 Units
Prerequisite: Satisfactory completion of ART 108
Pottery construction, emphasis on throwing and design. Field trips required. Trustee receipt required to purchase course materials as needed. Field trips may be required. Materials fee required. One completion allowed. Lecture/Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC.

ART 110—CERAMICS 3 3 Units
Prerequisite: Satisfactory completion of ART 109
Throwing techniques and surface decoration; experiments in clay bodies, glazes, and stacking of kiln. Field trips required. Trustee receipt required to purchase course materials as needed. Field trips may be required. Materials fee required. One completion allowed. Lecture/Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC.
ART 119—COMPUTER GRAPHICS PORTFOLIO REVIEW 1 Unit
Prerequisite: This course follows the completed courses of the Computer Graphics majors/certificate core requirements.

Also offered as CMPGR 219.
Prepares the student majoring or receiving a certificate in Computer Graphics with the necessary visual and business skills to develop a portfolio, emphasizing the creative and applied business needs for individuals entering the professional field of Computer Graphics. Field trips required. Lecture/Laboratory. (F Only) Transfer: CSU

ART 120—BASIC DRAWING 1 3 Units
An introductory course in techniques used in representing form, light and shadow, texture, perspective, composition, and expression using various drawing media. Field trips may be required. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. (F or P/NP) (MJC Activities) Transfer: CSU, UC (CC ART 210) (CC ART 1) General Education: (CSU-GE: C1)

ART 121—BASIC DRAWING 2 3 Units
Prerequisite: Satisfactory completion of ART 120
Further exploration of various drawing materials and techniques. Emphasis on composition, development of personal approach to drawing. Field trips may be required. One completion allowed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC

ART 123—FIGURE DRAWING 3 Units
Prerequisite: Satisfactory completion of ART 120
Fundamentals of art anatomy and representation of the human figure. Drawing of both the nude and draped figure in various media. Two maximum completions. Lecture/Laboratory. Field trips required. (MJC Activities) Transfer: CSU, UC (CC ART 9A)

ART 124—COLOR AND DESIGN 1 3 Units
Recommended for Success: Satisfactory completion of ART 120 or previous drawing experience
Design principles and color theory. Problems in two-dimensional form using various media. Field trips may be required. One completion allowed. Lecture/Laboratory. (F or P/ NP) Transfer: CSU, UC (CC ART 230) (CC ART 24)

ART 125—COLOR AND DESIGN 2 3 Units
Prerequisite: Satisfactory completion of ART 124
Expressions in design. Utilization of the elements and principles of design in two and three-dimensional form using various materials and techniques. Field trips may be required. Lecture/Laboratory. Other (Spring). (MJC Activities) Transfer: CSU, UC

ART 127—ALTERNATIVE DRAWING METHODS 3 Units
Prerequisite: Satisfactory completion of ART 120
Theory and practice of nontraditional drawing materials and techniques. Emphasis on contemporary approaches to drawing including mixed media, collage, nontraditional surfaces, and working in series. Further exploration of the compositional issues addressed in the Basic Drawing series. Transfer: CSU, UC (MJC-GE: Activities)

ART 140—SCULPTURE 1 3 Units
Study of form, structure and three-dimensional design as related to sculpture using various materials such as stone, plaster, clay, plastics and metals. Field trips may be required. Trustee receipt required to purchase course materials as needed. One completion allowed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC (CSU-GE: C) (IGETC: 3A)

ART 141—SCULPTURE 2 3 Units
Prerequisite: Satisfactory completion of ART 140
Continuation of ART 140; in-depth realization of sculpture in both concept and craftsmanship. Field trips may be required. Trustee receipt required to purchase course materials as needed. One completion allowed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC (CSU-GE: C) (IGETC: 3A)

ART 142—SCULPTURE 3 3 Units
Prerequisite: Satisfactory completion of ART 141
Continuation of ART 141 with an emphasis on experimentation and development of personal expression applied to sculptural problems. Field trips may be required. One maximum completions. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC

ART 144—WATERCOLOR PAINTING 1 3 Units
Prerequisite: Satisfactory completion of ART 120 or ART 124
Theory and practice of transparent watercolor painting using still life and landscape subject matter. Traditional and experimental techniques will be used. Field trips may be required. One completion allowed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC (CC ART 23A)

ART 145—WATERCOLOR PAINTING 2 3 Units
Prerequisite: Satisfactory completion of ART 144
A continuation of the concepts and skills developed in ART 144. Emphasis is placed upon experimentation and on the development of a personal painting style. Field trips may be required. One completion allowed. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC (CC ART 23B)

ART 146—MIXED MEDIA PAINTING 3 Units
Prerequisite: Satisfactory completion of ART 120 or ART 124
Theory and practice of acrylic or oil painting with an emphasis on experimental techniques and different mixed mediums. Lecture/Laboratory. Field trips may be required. Two completions allowed. (F or P/ NP) (MJC Activities) Transfer: CSU, UC

ART 147—PAINTING 1 (IN ACRYLIC) 3 Units
Prerequisite: Satisfactory completion of ART 120 or ART 124
Introduction to acrylic painting, basic techniques and stylistic approaches. Emphasis on developing form through color. One completion allowed. Field trips may be required. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC

ART 148—PAINTING 1 (IN OIL) 3 Units
Formerly listed as "ART 148 - Oil Painting 1"
Prerequisite: Satisfactory completion of ART 120 or ART 124
Introduction to oil painting, basic techniques and stylistic approaches. Emphasis on developing form through color. Field trips may be required. Lecture/Laboratory. Maximum one completion. (MJC Activities) Transfer: CSU, UC (CC ART 21A)

ART 149—PAINTING 2 3 Units
Formerly listed as "ART 149 - Oil Painting 2"
Prerequisite: Satisfactory completion of ART 147 or ART 148
Continued work in oil and acrylic painting, basic techniques and stylistic approaches. Emphasis on developing form through color. Field trips may be required. Maximum three completions. Lecture/Laboratory. (F or P/ NP) (MJC Activities) Transfer: CSU, UC (CC ART 21B)

ART 150—GALLERY OPERATION AND MANAGEMENT 3 Units
Recommended for Success: Concurrent enrollment in ART 160, 164, or 165
Introduction to the various aspects of operation and management of an art gallery: exhibition organization, hanging, publicity and jurying. Field trips required. Two maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU

ART 160—APPRECIATION OF ART 3 Units
Introductory art appreciation for the general student. Illustrated lectures in painting, sculpture, architecture and design. Field trips required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C) (IGETC: 3A)

ART 161—AMERICAN ART 3 Units
Analysis of the arts through the study of painting, sculpture, architecture, and history of North America from pre-historic times to the present. Emphasis will be on the arts of the United States. Field trips required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C) (IGETC: 3A)

ART 162—HISTORY OF RENAISSANCE ART 3 Units
Analysis of the European 14th-16th century drawing, painting, sculpture, and architecture, with an emphasis on the Italian High Renaissance masters. Field trips required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C) (IGETC: 3A)
ART 164—HISTORY OF ART 1 3 Units
Analysis of great art epochs through study of paintings, sculpture, architecture, and art history from prehistoric times to end of the Middle Ages. Field trips may be required. One completion allowed. Lecture. (A-F or P/NP) Transfer: CSU, UC. (TCSU ART 110) (CC ART 11) General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 165—HISTORY OF ART 2 3 Units
Continuation of study of painting, sculpture, and architecture from Renaissance to the present. Field trips may be required. One completion allowed. Lecture. (A-F or P/NP) Transfer: CSU, UC. (CC ART 12) General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 168—SURVEY OF PHOTOGRAPHY 3 Units
Recommended for Success: Satisfactory completion of ART 170 or 181. A survey course dealing with past and present photographic technique and imagery. Field trips required. Lecture. (Spring) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 169—HISTORY OF NON-WESTERN ART 3 Units
Analysis of the art forms of Africa, Oceania, Asia and the Americas in their relation to their cultural history from prehistoric times to the present. Field trips may be required. Lecture. Not offered every semester. Transfer: CSU, UC (CC ART 13) General Education: (MJC-GE: C) (CSU-GE: C1)

ART 170—BASIC PHOTOGRAPHY 3 Units
Introduction to the art and craft of photography: cameras, films, papers, basic black and white darkroom operations, composition, print quality, and photographic seeing. Field trips required. Project card use available. Lecture/Laboratory. Not offered every semester. Materials fee required. (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 172—INTERMEDIATE PHOTOGRAPHY 3 Units
Prerequisite: Satisfactory completion of ART 170 or 182. Refinement of basic craft, vision, and aesthetics as they apply to black and white photography. Continued emphasis on visual literacy and personalized seeing. Field trips required. Project card use available. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 173—DIGITAL IMAGING FOR PHOTOGRAPHERS 3 Units
Recommended for Success: Satisfactory completion of ART 170. Introductory course in digital imaging and electronic desktop photography. Applications related to the use of fine art photography and publication will be emphasized. This class includes lectures, discussions, critiques, computer laboratory work. Field trips required. Three maximum completions. Material fee required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 175—COLOR PHOTOGRAPHY 3 Units
Prerequisite: Satisfactory completion of ART 172 or 186. Introduction to color photography. Transparency and negative materials; printing processes; print presentation and aesthetics. Field trips required. Lecture/Laboratory. (A-F Only) (Fall) (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 178B,C,D—ADVANCED PHOTOGRAPHY 2,3,4 Units
Recommended for Success: Satisfactory completion of ART 172 or 186. Advanced exploration in the visual and technical areas of either black and white, color, or non-silver photography. Students will design a project and produce a portfolio of finished work. Field trips may be required. Materials fee required. Completions to 8 units maximum. Other - combination seminar, and hours arranged. Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 179—PHOTOJOURNALISM 3 Units
Prerequisite: Satisfactory completion of ART 170 Also offered as JRNAL 179 Study of photography as a tool in reporting news, sports and feature stories in print and online media. Examines work and approaches of professional photojournalists, develops fundamental skills in visual storytelling, camera, lighting and compositional techniques, editorial criteria, page layout, copyright and ethics. Photographs will be made with film and/or digital cameras and processed on computer. May be completed up to 2 times. (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 181—BASIC PHOTOGRAPHY 1 1½ Units
Introduction to the art and craft of photography - cameras, films, papers, basic black and white darkroom operations, composition, print quality, and photographic seeing. Field trips required. ART 181 and ART 182 are the two semester equivalent of ART 170 but do not fulfill the CSU-GE requirement. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 182—ADVANCED PHOTOGRAPHY 2 1½ Units
Prerequisite: Satisfactory completion of ART 181 Introduction to the art and craft of photography: cameras, films, papers, basic black and white darkroom operations, composition, print quality, and photographic seeing. ART 181 and ART 182 are the two-semester equivalent of ART 170. Field trips required. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 185—INTERMEDIATE PHOTOGRAPHY 1 1½ Units
Prerequisite: Satisfactory completion of ART 170 or 182. Refinement of basic craft, vision and aesthetics as they apply to black and white photography. Continued emphasis on visual literacy and personalized seeing. ART 185 and ART 186 are the two-semester equivalent of ART 172. Field trips required. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 189A—PHOTO LAB TECHNOLOGY 1 1 Unit
Recommended for Success: Satisfactory completion of ART 170 Maintenance and operation of a photographic lab facility: equipment, chemistry, scheduling and other related activities. Field trips required. Four maximum completions. Laboratory. (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

ART 191—PHOTOGRAPHY LAB TECHNOLOGY 2 1 Unit
Recommended for Success: Before enrolling in this class, students are strongly advised to satisfactorily complete ART 170 Maintenance and operation of a photographic lab facility: equipment, chemistry, scheduling and other related activities. Field trips may be required. Four maximum completions. Laboratory. (MJC Activities) (A-F or P/NP) Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 197—FIELD STUDIES IN PHOTOGRAPHY 1 Unit
Preparation of and participation in field studies of various thematic and technical approaches to photography as a fine art. Use of cameras and related equipment. Travel to specific geographic regions to augment the study of particular styles of photography. Geographic areas to be studied will vary from one term to the next. May be completed up to 4 times. (A-F or P/NP) Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ASTRO (Astronomy)

ASTRO 141—INTRODUCTION TO ASTROPHYSICS 3 Units
Prerequisite: Satisfactory completion of PHYS 142 or PHYS 101 Recommended for Success: Satisfactory completion of MATH 122 or qualification by MJC assessment process. Designed for students with a mathematical and/or scientific background. Study of planetary astronomy, stars and stellar evolution, gravity and cosmology, with emphasis on physical principles. Field trips required. Lecture. (A-F or P/NP) One completion allowed. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: 5A)
ASTRO 151 — INTRODUCTION TO ASTRONOMY LABORATORY 1 Unit
Corequisite: Satisfactory completion of or concurrent enrollment in ASTRO 141 or ASTRO 160.
Techniques in experimental astronomy. Determination of the properties of the Sun, and solar system objects, stars and galaxies. Use of the college telescopes and instruments may be incorporated into experiments. Laboratory. (A-F or P/NP) Transfer: CSU, UC General Education: (CSU-GE: B1, B3) (IGETC: SA)

ASTRO 160 — INTRODUCTION TO MODERN ASTRONOMY 3 Units
Introductory survey course in astronomy. Emphasis on current studies of solar system, the birth and death of stars and cosmology. Field trips may be required. Lecture. Materials fee may be required. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: SA)

AUBDY (Autobody)

AUBDY 115 — INTRODUCTION TO TECHNICAL INDUSTRIES 1 Unit
Also offered as AUTEC 115 and INTEC 115.
Introduction to educational and technical employment opportunities. Includes an understanding of curriculum requirements that pertain to educational goals as they relate to technical majors. Assists students in setting goals and developing skills necessary for life-long success in obtaining, maintaining, and advancing in technical careers. Current events that impact technical industries and society will be discussed. History and employment opportunities in technical industries. Techniques and applications of sound shop/agency practices and hazardous waste management. Development of an educational plan and presentations by MJC counselors. Field trips may be required. Materials fee required. Lecture/Other (A-F Only) (MJC Guidance) Transfer: CSU

AUBDY 301 — AUTOMOTIVE COLLISION REPAIR 1 5 Units
Study of body sheet metal and structural strength, body design and sheet metal working characteristics. Training in welding, brazing, metal bumping, metal finishing and plastic filling, heat shrinking, shop safety. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 302 — AUTOMOTIVE COLLISION REPAIR 2 5 Units
Prerequisite: Satisfactory completion of AUBDY 301
Body repair techniques. Progressive training in the use of hydraulic portopower equipment, plastic repairs, and corrosion protection. Installation of fenders, hoods, doors and alignment procedures. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 303 — AUTOMOTIVE COLLISION REPAIR 3 4 Units
Prerequisite: Satisfactory completion of AUBDY 302
Training in automobile body measurement and alignment; replacement of welded body parts; methods of sectioning; types of glass and glass operating mechanisms; upholstery, trim and moldings. Techniques and procedures in MIG welding and Mild HSS Steel. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 304 — AUTOMOTIVE COLLISION REPAIR 4 4 Units
Prerequisite: Satisfactory completion of AUBDY 303
Specialized training in major body repairs, rebuilding, unibodyized body alignment and fundamentals of frame repair, damage estimating and shop management. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 321 — AUTOMOTIVE SPRAY REFINISHING 1 2 Units
Introduction to automobile spray painting. Study of materials, supplies and equipment. Experience in feather-edging and application of base coats; spray techniques in spot blending and panel refinishing with a base coat and clear coat. Field trips may be required. Lecture/Laboratory/Other. Materials fee required. (A-F Only)

AUBDY 322 — AUTOMOTIVE SPRAY REFINISHING 2 3 Units
Prerequisite: Satisfactory completion of AUBDY 321 and (AUBDY 301 or 351)
Continuation of AUBDY 321 with further instruction in complete refinishing with single stage enamels, base coat/clear coat enamels, and estimate writing. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 351 — AUTO BODY COLLISION REPAIR 1 2 Units
For beginning students in auto body collision work. Theory and study of the body sheet metal and structure. Theory and manipulative skills in oxy-ace welding, sheet metal strengthening, plastic filling and shrinking. Lecture/Laboratory. Materials fee required. (A-F Only)

AUBDY 352 — AUTO BODY COLLISION REPAIR 2 2 Units
Prerequisite: Satisfactory completion of AUBDY 351
Continued development of skills competence in metal strengthening through individual project work. Student must supply own project, and it must meet instructor’s approval. Study of theory, equipment and manipulative techniques in MIG welding and spray refinishing, up to and including surface preparation and priming. (No complete or spot color repairs are allowed in evening classes without instructor’s approval.) Lecture/Laboratory. Materials fee required. (A-F Only)

AUTEC (Automotive Technology)

AUTEC 115 — INTRODUCTION TO TECHNICAL INDUSTRIES 1 Unit
Also offered as AUBDY 115 and INTEC 115.
Introduction to educational and technical employment opportunities. Includes an understanding of curriculum requirements that pertain to educational goals as they relate to technical majors. Assists students in setting goals and developing skills necessary for life-long success in obtaining, maintaining, and advancing in technical careers. Current events that impact technical industries and society will be discussed. History and employment opportunities in technical industries. Techniques and applications of sound shop/agency practices and hazardous waste management. Development of an educational plan and presentations by MJC counselors. Field trips may be required. Materials fee required. Lecture/Other (A-F Only) (MJC Guidance) Transfer: CSU

AUTEC 241 — DIESEL ENGINE PRINCIPLES 3 Units
The operation and repair of modern diesel engines. Principles and theories are studied by running, testing, diagnosing, disassembling and reassembling components, systems, and engines. Field trips required. Materials fee required. Lecture/Lab. (A-F Only) Transfer: CSU

AUTEC 289 — PRINCIPLES OF POWER MECHANICS/SMALL ENGINES 3 Units
Formerly listed as: AGM/AUTEC 389
Also offered as AGM 289.
Introduction to the operation, construction, maintenance, repair and adjustments of two and four-stroke engines. Designed for persons without prior experience in engine repair. Experienced technicians will also benefit. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

AUTEC 311 — BASIC AUTOMOTIVE SYSTEMS 3 Units
Basic repair practices of automotive systems to include cooling, lubrication, fuel, exhaust, and electrical. Proper selection and use of automotive shop manuals, charts, service publications, tools, measuring devices, etc. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

AUTEC 315 — A1: ENGINE REPAIR 3½ Units
Formerly listed as “Engine Rebuilding” Prerequisite: Satisfactory completion of AUTEC 311
Use of automotive machine shop equipment. Engine disassembly, cleaning, inspection, measuring, and reassembly procedures. Lecture/Laboratory. Materials fee required. Lecture/Laboratory. (A-F Only)

AUTEC 317 — A7: AUTO HEATING AND AIR CONDITIONING 3 Units
Corequisite: Satisfactory completion of AUTEC 311
Principles of automotive air conditioning and the components used in air conditioning. Factory-installed air conditioning units and add-on type units. Charging, leak detection, component replacement and repair procedures. Lecture/Laboratory. Materials fee required. (A-F Only)
AUTEC 319 — A8: ENGINE PERFORMANCE  3½ Units  
Prerequisite: Satisfactory completion of AUTEC 368  
Corequisite: Satisfactory completion of, or concurrent enrollment in AUTEC 369.  
Prepares students for Automotive Service Excellence A8 Examination. Comprehensive study of 
diagnosis and repair applications including general engines, ignition systems, fuel, air induction and 
and exhaust systems, emission control systems, computerized engine controls, and engine electrical 
systems. Lecture/Laboratory. Materials fee required. (A-F Only).

AUTEC 320 — L1: ADVANCE ENGINE PERFORMANCE  4 Units  
Prerequisites: Satisfactory completion of AUTEC 319  
Prepares students for the Automotive Service Excellence L1 Examination. Advance engine perfor-
mance topics including test equipment and diagnosis techniques of powertrain and computerized 
powertrain controls, fuel system and air induction systems, automotive emission controls and I/M 

AUTEC 321 — A5: BRAKES SYSTEMS  3½ Units  
Prerequisite: Satisfactory completion of AUTEC 311.  
Prepares students for the Automotive Service Excellence A5 Examination. Principles of design and 
operation, techniques for repair, diagnosis and replacement of four-wheel braking systems. Empha-
sis will be placed on the theory of operation, diagnosis and repair of modern braking systems and 
their related components. Preparation for the State Brake Test and ASE Certification Test is included. 
Lecture/Laboratory. Materials fee required. (A-F Only)

AUTEC 322 — A4: STEERING, SUSPENSION AND ALIGNMENT  3½ Units  
Prerequisite: Satisfactory completion of AUTEC 311.  
Prepares student for the Automotive Service Excellence A4 Examination. Principles of design and 
operation, techniques for diagnosis and repair of steering and suspension systems. Includes com-
ponent replacement and alignment theory and procedures using two and four-wheel alignment 
equipment. Lecture/Laboratory. Materials fee required. (A-F Only).

AUTEC 323 — A2: AUTOMATIC TRANSMISSION AND TRANSAXLES  3½ Units  
Prerequisite: Satisfactory completion of AUTEC 311.
Prepares students for the Automotive Service Excellence A2 Examination. A detailed study of the 
clutch, standard and automatic transmissions, drive lines and differentials; theory of operation 
including: friction materials, hydraulics, torque converters, gear trains, planetary gears, and controls 
as well as gear ratios, torque-multiplication, speeds, drive line angles and tooth patterns. (A-F Only)  
Materials fee required.

AUTEC 324 — A3: MANUAL TRANSMISSION AND DRIVE AXLES  3 Units
Prerequisite: Satisfactory completion of AUTEC 311.  
Prepares students for the Automotive Service Excellence A3 Examination. Construction, operation 
and diagnosis of manual transmissions and axles, to include service and overhaul. Theory as well as 
"hands-on" training with clutch systems and drive-axle operation and service. (A-F Only) Materials Fee required.

AUTEC 368 — A6: AUTOMOTIVE ELECTRICITY/ ELECTRONIC SYSTEMS 1  3½ Units  
Prerequisite: Satisfactory completion of AUTEC 311.
Introduction to automotive electrical systems. Covers basic fundamentals: Ohm’s law, starting and 
charging systems, batteries, alternators and starters. Course also covers principles of operation, 
testing, adjusting, and rebuilding procedures. (A-F Only) Materials fee required. Lec/Lab

AUTEC 369 — A6: AUTOMOTIVE ELECTRICITY 2  4 Units  
Prerequisite: Satisfactory completion of AUTEC 368  
Prepares students for the Automotive Service Excellence A6 examination. Fundamentals of automotive 
electronics and electrical components including ignition, computer, light and horn circuits, indicat-
ing devices, electrical accessories and computer-controlled devices. Lab emphasis on testing and 
servicing electrical equipment. (A-F Only) Materials fee required. Lecture/Laboratory.

AUTEC 373 — 97 B.A.R. CLEAN AIR COURSE  5 Units  
Prerequisites: Satisfactory completion of AUTEC 311 OR as outlined by C.A.R.B. specifica-
tions.  
Provides the experienced automotive mechanic with comprehensive, up-to-date background in 
auto emission control. Modern test equipment and techniques will assure that engine operation 
and emission levels are within manufacturers' and California Air Resources Board (C.A.R.B.) specifi-
cations. Prepares the student to take the California Bureau of Automotive Repair (B.A.R.) Smog Check 
Mechanic Qualification Examination. B.A.R. requires a minimum of 90% attendance and 70% (C) 
grade for completion. Two maximum completions, Lecture/Laboratory. Materials fee required. Not 
offered every semester.

BIO (Biology)  

All courses are offered for letter grade only unless otherwise stated.  
Biology majors must take major courses on a letter grade basis. All 
majors must complete a program of courses approved by the division.
Suggested curricula for specific biological sciences majors and related 
fields may be obtained from the advisors. Classes may sometimes 
convene at off-campus sites within the YCCD.

BIO 50 — BASIC BIOLOGY  3 Units
Introduction to the study of living organisms. Intended as a practical foundation for students 
interested in a basic knowledge of biological principles, terminology, and the scientific process. May 
serve as a bridge to transfer-level biology courses and is not open to students who have completed 
BIO 101 or 111. Lecture/Discussion/Demonstration. Field trips may be required. Materials fee may be 
required. General Education: (MUC-GE: A)

BIO 101 — BIOLOGICAL PRINCIPLES  5 Units
Prerequisite: Satisfactory completion of (CHEM 142, 143, or 101) and eligibility for MATH 
101 or higher.
Study of general principles of biology in relationship to the process of all living organisms. Topics 
include an introduction to the nature of science, reproduction, development, evolution, energetics, 
molecular biology, genetics, cellular structure, homeostatic mechanisms, ecology, and taxonomy. 
Core course intended for biology and biology-related majors. Lecture/Laboratory. Field trips may be required.  
Transfer: CSU, UC (TCSU BIOL SEQ A) (CC BIOL 2) General Education: (MUC-GE: A) 
(CSU-GE: B2, B3) (IGETC: SB)

BIO 111 — GENERAL BIOLOGY  4 Units
Introduction to principles of life, including reproduction, heredity, development, evolution, histori-
Cal development of biology, molecular biology and ecology. Not open to students who have completed 
BIO 101. Not a substitute for BIO 101. Field trips may be required. Lecture/Laboratory. Transfer: 
CSU, UC (CC BIOL 17) General Education: (MUC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

BIO 115 — GENETICS, EVOLUTION, AND SOCIETY  3 Units
Exploration of basic principles of genetics and evolution as unifying themes in the biological 
sciences. Emphasis on analysis of gene action, mutation, inheritance, natural selection, evolution 
of life and of species, biotechnologies and their implications for society. Lecture. Transfer: CSU, UC 
General Education: (MUC-GE: A) (CSU-GE: B2) (IGETC: SB)

BIO 130 — INTRODUCTION TO MARINE VERTEBRATES  3 Units
Recommended for Success: Satisfactory completion of a college-level biology course.  
Groups of vertebrates adapted to marine environment; structural, physiological, and behavioral 
modifications making adaptation possible, species within those groups common to Pacific coastline. 
Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MUC-GE: A) 
(CSU-GE:B2)

BIO 130L — INTRODUCTION TO MARINE VERTEBRATES LABORATORY  1 Unit
Prerequisite: Satisfactory completion of BIO 130 or concurrent enrollment.
In depth study of selected topics from BIO 130 through the use of specimens, slides, laboratory 
exercises and field trips. Laboratory. Field trips required.  Transfer: CSU, UC General Education: 
(MUC-GE: A) (CSU-GE:B3)
### BIO 140—INTRODUCTION TO MARINE BIOLOGY 4 Units
Introduction to the natural history of plants and animals of the temperate and tropical marine environment including rocky shores, mud flat, sandy beach, salt marsh, coral reef, mangal forest, open ocean, deep ocean, bay/estuary and Sacramento-San Joaquin Delta communities. Arctic and Antarctic marine ecosystems will also be introduced. Field trips may be required. Lecture/Laboratory. **Transfer:** CSU, UC General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

### BIO 145—INTRODUCTION TO FRESHWATER BIOLOGY 4 Units
Introduction to the natural history of common organisms of the freshwater environment along with basic ecological principles, which includes: energy flow, nutrient cycling, population dynamics, and community structure. (A-F or P/NP) Field trips required. Lecture/Laboratory. Materials fee required. **Transfer:** CSU, UC General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

### BIO 151X,A,B,C—Biology Field Studies ½,1,2,3 Units
**Recommended for Success:** Before enrolling in this course, students are strongly advised to satisfactorily complete (BIO 111, BIO 101, ZOO 101, BOT 101 or other college-level biology course.)
Field trips to representative and unique ecosystems. Emphasis on life histories, adaptations and biological interactions of organisms within the ecosystem studied. Field experiences will include sampling methods, preparation of field notes and field identification of species characteristic of the ecosystem. Field trips are required. Lecture/Laboratory. Four maximum completions not to exceed 6 units. Materials fee required. Not offered every semester. **Transfer:** CSU, UC General Education: (CSU-GE: B2, B3) (IGETC: SB)

### BUSAD 200—Spreadsheet Skills for Financial Accounting 2 Units
**Prerequisite:** Concurrent or previous enrollment in BUSAD 206 or BUSAD 310. Introduction to spreadsheet software. Spreadsheet analysis, design, testing and documentation as they relate to the field of accounting will be covered, hands-on experience using a microcomputer. Microsoft Excel or a similar spreadsheet application will be used. Lecture/Laboratory. **Transfer:** CSU

### BUSAD 201—Financial Accounting 4 Units
**Recommended for Success:** Satisfactory completion of BUSAD 310 and ENGL 101 placement eligibility.
Explores what financial accounting is, why it is important, and how it is used by investors and creditors to make decisions; focusing on a preparer approach. Covers the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle; the application of generally accepted accounting principles, the classified financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls and ethics. Lecture. **Transfer:** CSU, UC (TCSU BUS 110) (CC BUSAD 1A)

### BUSAD 202—Managerial Accounting 4 Units
**Prerequisite:** Satisfactory completion of BUSAD 201.
Examination of how managers use accounting information in decision-making, planning, directing operations, and controlling. Focus on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit-analysis. Examination of profit planning, standard costs, operations and capital budgeting, cost control, and accounting for costs in manufacturing organizations. (A-F or P/NP) Course is not repeatable. Field trips are not required. Course is applicable to the associate degree. Lecture. **Transfer:** CSU, UC (TCSU BUS 120) (CC BUSAD 1B)

### BUSAD 203—Computer Accounting 3 Units
**Prerequisite:** Satisfactory completion of BUSAD 201 or 310.
Recommended for Success: BUSAD 320 if BUSAD 310 is used to satisfy the prerequisite. Introduction to the use of the computer in accounting/booking/keeping. Practical applications of accounting through hands-on experiences on the personal computer using a variety of current computer accounting software packages. Lecture/Laboratory. **Transfer:** CSU

### BUSAD 204—Cost Accounting 3 Units
**Prerequisite:** Satisfactory completion of BUSAD 201 and 202.
Introduction to cost accounting theory and practice. Control of material, labor and burden costs; methods of applying expenses, job order and process cost system, cost statements. Lecture. **Transfer:** CSU

### BUSAD 208—Introduction to International Business 3 Units
**Recommended for Success:** Satisfactory completion of BUSAD 248 Also offered as AGEC 208.
A comprehensive overview of international business. Offers a global perspective of international trade, international organizations and the political and cultural impact of world trade. Lecture. Field trips may be required. **Transfer:** CSU

### BUSAD 209—Import/Export Fundamentals 3 Units
**Recommended for Success:** Satisfactory completion of BUSAD 208 Also offered as AGEC 209.
Overview of processes and procedures involved in importing and exporting products and services. Special emphasis on finance and financial documentation. Lecture. Field trips may be required. **Transfer:** CSU

### BUSAD 210—Business Communication 3 Units
**Recommended for Success:** Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101
Principles and applications of written and oral business communications, including routine memo and letter writing, persuasive writing, oral communication, and informative report writing. (A-F or P/NP) Lecture. **Transfer:** CSU General Education: (MJC-GE: D)

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### BOT (Botany)

### BOT 101—General Botany 4 Units
**Prerequisite:** Satisfactory completion of BIO 101
Principles of plant life, plant morphology, anatomy, physiology, reproduction, genetics, evolution, and ecology of bacteria, fungi, algae, archea, slime molds, bryophytes, and vascular plants. Lecture/Laboratory. Field trips may be required. Transfers: CSU, UC (CC BIOL 6)(TCSU BIOL SEQ A) General Education: (CSU-GE: B2, B3) (IGETC: SB)

### BOT 110—Plant Biology 3 Units
Introduction to plants, including structure and function, heredity, development, reproduction, ecology, and evolution as they pertain to plants. Not open to students who have completed Biology 101. Not a substitute for Botany 101. Lecture/Laboratory. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: SB)

### BUSAD (Business Administration)

### BUSAD 100—Studies in Business Success 1½ Units
**Recommended for Success:** Satisfactory completion of GUIDE 110
Discussion of academic and other requisites for success in various business fields. Students will create a personal development plan for meeting academic requirements, acquisition of necessary skills, and entry into the job market of their elected field. Lecture. **Transfer:** CSU
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 218</td>
<td>BUSINESS LAW</td>
<td>4</td>
<td>Recommended for Success: Third semester Business major. Laws and regulations affecting managerial decisions; legal concepts and case analyses in the areas of ethics, employment, consumer transactions, competition, the environment, business torts and crimes, contracts, agency, business organizations, and international business. Lecture. Transfer: CSU, UC (CC BUSAD 18)</td>
</tr>
<tr>
<td>BUSAD 230</td>
<td>PERSONAL FINANCE</td>
<td>3</td>
<td>Principles and practices of business from the consumer’s point of view; factors involved in intelligent management of income and expenditure and ethical maximization of personal financial gain. Income and wealth distribution; occupational earnings; wise buying; consumer rights and legislation and protective agencies; credit and borrowing; financial services; automobiles; property; liability; health, life, and disability insurance; retirement; social security; pensions; annuities; housing; savings and investment; taxes; estate planning. Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 233</td>
<td>INVESTMENTS</td>
<td>3</td>
<td>Recommended for Success: Satisfactory completion of BUSAD 230, and at least one semester of accounting. Thorough study of corporate stocks and bonds, with time deposits, government securities, mutual funds, real estate, commodity futures, options and less common investment media receiving brief consideration. Emphasis on careful, critical investigation of risk and reward—rigorous mathematical analysis expected. Field trips may be required. Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
<td>(Not open to those who have completed management telecourse.) An introductory study of the basic business management functions: planning, organizing, leading, and controlling. Lecture. Transfer: CSU (CC BUSAD 40) General Education: MJC-GE: B</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3</td>
<td>Understanding customer needs and behavior, developing a product and/or service mix to satisfy customer needs profitably, determining promotional strategy, selecting channels and methods of distribution, establishing appropriate prices. Legal, political, cultural, social, economic, competitive and ethical aspects of marketing. Field trips may be required. Lecture. Transfer: CSU (CC BUSAD 30)</td>
</tr>
<tr>
<td>BUSAD 246</td>
<td>STORE MANAGEMENT</td>
<td>3</td>
<td>An examination of the resources, abilities and knowledge necessary to establish and operate a retail business successfully. Subjects studied include site selection, merchandising policies and management, buying policies and activities, pricing, retail promotion, customer service and credit, personal selling and marketing research for retailers. Lecture. Transfer: CSU (CC BUSAD 20)</td>
</tr>
<tr>
<td>BUSAD 247</td>
<td>WEB MARKETING</td>
<td>3</td>
<td>Designed to provide an understanding of the World Wide Web and its potential as a marketing tool. Includes application basics, design, and utilization in primary or supportive e-commerce roles. Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 248</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
<td>Survey of business principles, problems and operations; legal, ethical, moral, and social issues; ownership, human resources; management; production; marketing; finance; managerial controls; government regulation; risk management. Lecture. Transfer: CSU, UC (CC BUSAD 20)</td>
</tr>
<tr>
<td>BUSAD 249</td>
<td>BUSINESS INTERNSHIP</td>
<td>4</td>
<td>An internship program with selected business firms dealing with either accounting, computer science, marketing, business law, office administration, bookkeeping, or retail management practices in public or private agencies. Student interns will be under joint supervision of the employers and a faculty members. Intended to provide practical applications for students who have developed theoretical knowledge and effective interpersonal skills by completing their discipline's introductory level course(s). See appropriate instructor for required enrollment forms. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 259</td>
<td>SMALL BUSINESS MANAGEMENT</td>
<td>3</td>
<td>Provides those intending and those involved in small business with the tools to help insure success. Covers establishing marketing, managing, and financing the new firm. Field trips may be required. Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 274</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
<td>Principles and methods related to effective utilization of human resources in organizations. Understanding human relations involved in recruitment, selection, and placement of employees with regard to training, experience, and abilities. Discussion, illustrations, and case studies to develop techniques effective in dealing with personnel problems. Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 299A,B</td>
<td>MARKETING PROJECTS</td>
<td>1.2</td>
<td>Formerly listed as: BUSAD 285A,B — Special Projects Independent analysis or design of computer accounting software or work in specialized BUSAD topics. Projects must have the approval of instructor. Conference with the instructor: minimum of 1 per month. Completions up to 4 maximum units. Laboratory Transfer: CSU</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>MACHINE CALCULATION</td>
<td>2</td>
<td>Recommended for Success: Satisfactory completion of MATH 20 Instruction in the operation of the electronic calculator including addition, subtraction, multiplication, and division using constant factors and automatic accumulation as applied to business applications. Major emphasis on 10-key touch operation. Lecture/Laboratory.</td>
</tr>
<tr>
<td>BUSAD 303</td>
<td>INTRODUCTION TO THE CALIFORNIA GAMING INDUSTRY</td>
<td>3</td>
<td>Recommended for Success: Basic English and basic arithmetic skills. Introduction to the history, current issues, laws, regulations, and career opportunities in the California Gaming Industry. Discusses the roles and responsibilities of gaming industry employees and provides hands-on training experiences in the terminology, skills and operations of legal games available throughout California. Students successfully completing this course will be prepared to seek employment within the gaming industry. Field trips required. Lecture/Laboratory. Students are required to replace lost or damaged course materials.</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>BOOKKEEPING 1</td>
<td>3</td>
<td>Recommended for Success: Satisfactory completion of BUSAD 300 or MATH 50. Essential bookkeeping fundamentals for job entry in business. Basics of double entry bookkeeping, general and special journals, general and subsidiary ledgers, business forms, payroll records and governmental payroll forms. Recommended as a preparatory course for BUSAD 201, Financial Accounting. Lecture.</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>PAYROLL ACCOUNTING</td>
<td>3</td>
<td>Recommended for Success: Satisfactory completion of BUSAD 310 or 201. Prerequisites: Satisfactory completion of BUSAD 310. Completing the payroll register. Reporting payroll tax information to the federal and state governments, with emphasis on completing both quarterly and annual reports. Making the necessary journal entries to record payroll transactions. Computing payroll on the microcomputer. Lecture/Laboratory.</td>
</tr>
<tr>
<td>BUSAD 320</td>
<td>BOOKKEEPING 2</td>
<td>3</td>
<td>Recommended for Success: Satisfactory completion of BUSAD 310 Prerequisites: Satisfactory completion of BUSAD 310. Entries requiring analysis and interpretation; entries for promissory notes; adjustments for prepaid; unlearning and accrued items, depreciation of assets, property sales, closing of books; partnership and corporate accounting, cash flows and financial analysis. Lecture.</td>
</tr>
<tr>
<td>BUSAD 331</td>
<td>BEGINNING COMPUTER ACCOUNTING SOFTWARE</td>
<td>1</td>
<td>Prerequisites: Satisfactory completion of BUSAD 310 or 201. Recommended for Success: BUSAD 320 if BUSAD 310 is used to satisfy prerequisite. A beginning course using features of computerized accounting software package(s). Course is designed to enable students to learn and apply the features of computerized accounting software to record, process and communicate financial accounting data for a Service Company in the small business setting. Lecture. Two maximum completions.</td>
</tr>
</tbody>
</table>
BUSAD 332—INTERMEDIATE COMPUTER ACCOUNTING SOFTWARE
1 Unit
Prerequisites: Satisfactory completion of BUSAD 331
A continuation of the beginning course using features of computerized accounting software package(s). Course is designed to enable students to learn and apply the features of computerized accounting software to record, process and communicate financial accounting data for a Merchandising Company in the small business setting. Lecture. Two maximum completions.

BUSAD 333—COMPUTER ACCOUNTING SOFTWARE
2 Units
Prerequisites: Satisfactory completion of BUSAD 310 or 201.
Recommended for Success: Satisfactory completion of BUSAD 320 if BUSAD 310 is used to fill prerequisite.
A combination of BUSAD 331 and BUSAD 332. A beginning course using features of computerized accounting software package(s). Course is designed to enable students to learn and apply the features of computerized accounting software to record, process and communicate financial accounting data for a Service Company and for a Merchandising Corporation in the small business setting. Lecture. Two maximum completions.

BUSAD 336—TAX ACCOUNTING
3 Units
Recommended for Success: Satisfactory completion of BUSAD 201 or 310
US Federal Income Tax to include preparation of Federal Tax Returns, supplemental Federal schedules for individuals and business forms, and computation of social security and other self-employment taxes. One completion allowed. (A-F or P/NP) Field trips may be required. Lecture. (Fall)

BUSAD 358—SALES AND ADVERTISING PROMOTION
3 Units
Fundamentals of personal selling and advertising. The sales process is defined and analyzed. The use of a variety of advertising techniques, methods, and media are explored. Stresses practical application. Lecture.

BUSAD 364—TOTAL QUALITY MANAGEMENT
3 Units
Recommended for Success: Satisfactory completion of SUPR 351, BUSAD 240 or equivalent.
Also offered as SUPR 364.
(NOT open to those who have completed management telecouse.)
This course provides an introduction to W. Edward Deming's philosophy of Total Quality Management and its implications for improving the competitiveness of American business in the international economy. A variety of related management topics is also presented. Lecture.

BUSAD 377—HUMAN RELATIONS IN BUSINESS
3 Units
People and their roles in the business and non-profit community. The nature of work, the work environment, personal skills and performance, work groups, and solving human relations problems. Lecture.

BUSAD 379—CUSTOMER RELATIONS
1 Unit
Provide the student with skills and attitudes necessary to be successful in the workplace. Focusing upon internal and external business interactions, customer satisfaction, departmental dynamics, appropriate procedure and protocol. Field trips may be required. Lecture.

BUSAD 380—CUSTOMER SERVICE
1 Unit
Provide the student with the skills necessary to establish effective customer service. Including public administration skills, sales techniques, and conflict management. Course is focused upon serving the public. Field trips may be required. Lecture.

BUSAD 391—LOGISTICS MANAGEMENT
3 Units
Basic aspects of Logistics Management: to include customer service, transportation, distribution, warehousing, inventory procurement, and materials handling management. Lecture. Field trips required.

CGR 201—GRAPHIC ARTS FUNDAMENTALS
3 Units
History of major printing processes; application of layout and design, hot and cold type composition, proofreading, paste-up, process photography, offset production procedures, paper, printing inks, bindery and photographic legal restrictions. Field trips may be required. Lecture. Material fee required. (Fall) Transfer: CSU (MJC Activities)

CGR 211—TYPOGRAPHY 1
3 Units
Basic fundamentals of typesetting and composition. Includes instruction in the printer's point system, type face identification and mark-up procedures. Operation of display and typesetting equipment. Note: PageMaker software. Field trips may be required. Lecture/Laboratory. (Fall) Transfer: CSU (MJC Activities)

CGR 212—ELECTRONIC PREPRESS
3 Units
Recommended for Success: Concurrent enrollment in CGR 211.
Terminology, materials, equipment, facilities and methods used in electronic prepress. Electronic job planning and layout basics, such as: file formats, fonts, imposition, trapping, screen angels, preflight, postscript output, image setters, proofing and output to plates. Techniques of preparing electronic files for output to: postscript printers, image setters, and direct to plate. Procedures for preparing line art, black and white photos, color photos, clip art and software created illustration. Scaling graphics to layout specs and working with single multicolored layouts. Note: Illustrator software. Field trips may be required. Lecture/Laboratory. (Fall) Transfer: CSU (MJC Activities)

CGR 214—PRINTING PRESSES AND BINDERY 1
3 Units
Formerly listed as GRC 214.
Introduction to bindery work: planning, paper cutting, folding, assembling, finish work and packaging. Introduction to single color small offset presses. Operations and maintenance of feeders and printing units. Fundamentals of press chemistry. Use press adjustments to control ink and water systems. Fundamental use of offset plates. Field trips may be required. Lecture/Laboratory. Transfer: CSU (MJC Activities)

CGR 215—PRINTING PRESSES AND BINDERY 2
3 Units
Recommended for Success: Concurrent enrollment in CGR 214.
Planning for litho plating; handling and repair of litho negatives; special negative operations—scribing, spattering, retouching, flat layout and imposition, step and repeat stripping, single and multiple negative masking. Lecture/Laboratory. Materials fee required. (Spring) Transfer: CSU (MJC Activities)

CGR 222—IMAGE ASSEMBLY AND PLATEMAKING
2 Units
Recommended for Success: Satisfactory completion of OFADM 351 and CGR 214.
Planning for litho plating; handling and repair of litho negatives; special negative operations—scribing, spattering, retouching, flat layout and imposition, step and repeat stripping, single and multiple negative masking. Lecture/Laboratory. Materials fee required. (Spring) Transfer: CSU

CGR 223—PRINTING PRESSES AND BINDERY 2
3 Units
Recommended for Success: Satisfactory completion of CGR 214
Formerly listed as GRC 223.
Intermediate skills in bindery work, including those listed in CGR 214 and specialty printing production to include foil stamping and embossing. Intermediate skills on printing presses to include two or more colors with tight registration. Troubleshooting, maintenance, and planning for printing of multi color jobs. Field trips may be required. Lecture/Laboratory. Transfer: CSU (MJC Activities)

CGR 224—ELECTRONIC PUBLISHING SYSTEMS
3 Units
Recommended for Success: Satisfactory completion of OFADM 351
Formerly listed as GRC 224.
Introduction to electronic publishing systems, to include text generation, computer-designed graphics. Typographical applications and typesetting devices, to include image setters and direct to plate devices. Current options for hardware and software used in the graphic communication industry and the advantages and disadvantages. Postscript and its role in electronic publishing. Field trips may be required. Two maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU (MJC Activities)

CGR (Communication Graphics)
CGR 225—PRODUCTION SCREEN PRINTING 2 Units
Fundamentals of production screen printing on multi-media or substrates. Screen printing with single and multi-color with handline registration. Field trips may be required. Materials fee required. Lecture/Laboratory. (Spring) Transfer: CSU.

CGR 230—GRAPHIC DESIGN 3 Units
Recommended for Success: Satisfactory completion of ART 120, ART 124, CGR 211, CGR 212, and CGR 224. Provides a knowledge of graphic design principles and applications in business today. Note: Illustrator software. Lecture/Laboratory. Field trips required. Transfer: CSU (MJC Activities)

CGR 232—GRAPHIC DESIGN PORTFOLIO DEVELOPMENT 1 Unit
Recommended for Success: Before enrolling in this course, students are strongly advised to complete a minimum of 15 units in the CGR major.
Students develop their knowledge and skill for organizing a comprehensive professional portfolio that prepares their work to pursue career opportunities in the graphic design and printing industry. Portfolios include a collection of individual and group projects, resume, a professional cover letter, and samples of completed job applications. Students prepare and present their portfolio as a final project. (A-F or P/NP) Lecture. (A-F Only) Transfer: CSU

CGR 233—TYPOGRAPHY 2 3 Units
Recommended for Success: Satisfactory completion of CGR 211 and 212.
Instruction in advanced typesetting techniques relating to commercial printing: Operation of display, text, and computer assisted typesetting equipment. Advanced methods of form composition. Note: QuarkXPress software. Lecture/Laboratory. (A-F Only) (Spring)

CGR 332—PRODUCTION PRESSES AND BINDERY 3 Units
Recommended for Success: Satisfactory completion of CGR 214, 223 or equivalent training. Formerly listed as GRC 332.
Fundamentals in care, maintenance and setting of rollers in large press systems. Includes instruction in operational procedures for large presses, including handling of press plates. Special attention given to complex color printing and production printing of all types. Production bindery in all areas to include: folding, stitching, coil binding, fastback binding, and specialty presses for bindery. The emphasis will be on production and quality control. Field trips may be required. Lecture/Laboratory. (A-F Only) (Fall)

CGR 333—PHOTO TECHNIQUES 3 Units
Recommended for Success: Satisfactory completion of CGR 211 and 221.
Photo manipulation procedures: Photoshop training, image capture using scanners and digital cameras, output devices (printing and image setters), special films, proofing methods and materials, and utilizing industry equipment and software. Note: Primary software (Photoshop). Lecture/Laboratory. (A-F Only) (Fall) (MJC Activities)

CGR 342—DESIGNING FOR CLIENTS 2 Units
Prerequisite: Satisfactory completion of CGR 212.
Recommended for Success: Satisfactory completion of 211, 224, 230, 221, and 331.
Techniques required to design and prepare copy for several types of printing media. Emphasis on digital skills and procedures required for the production of artwork. Design and preparation of printing for a client. Field trips may be required. Lecture/Laboratory. (A-F Only) (Spring)

CGR 350—GRAPHIC COMMUNICATION INTERNSHIP 2 Units
Prerequisite: Minimum of 15 units completed in Communication Graphics major.
Supervised field experience in graphic communications. Study and research related to job training. Current developments in graphic communications. Initial orientation, two student/instructor conferences and one local work-site visit. 150 hours paid or 120 hours non-paid work per semester equals 2 units. Three maximum completions.

CGR 352—PRODUCTION MANAGEMENT 1 Unit
Prerequisite: Minimum of 15 units completed in Communication Graphics major.
Fundamentals of Graphics Production Management to include: job flow, production work, maintenance schedules, estimating, purchasing, production scheduling, and development of portfolios. Field trips may be required. Laboratory. (Spring)

CHEM 101—General Chemistry 1 5 Units
Prerequisite: Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to complete CHEM 142 with a grade of C or better or complete High School Chemistry with a grade of B or better.
Principles of chemistry emphasizing measurements and significant figures, chemical reactions, stoichiometry, gas laws and theory, thermodynamics, atomic structure and quantum mechanics, periodic properties, chemical bonding, molecular structure, intermolecular attractions and properties of liquids and solids, and properties of solutions. Field trips are not required. (A-F or P/NP) Lecture/Lab/Discussion. Transfer: CSU, UC (CC CHEM 1A) General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: SA)

CHEM 102—GENERAL CHEMISTRY 2 5 Units
Prerequisite: Satisfactory completion of CHEM 101.
Continuation of CHEM 101 emphasizing kinetics, solutions, equilibrium, acids and bases, electrochemistry, thermodynamics, nuclear chemistry, coordination chemistry and descriptive chemistry. Field trips are not required. Lecture/Lab/Discussion (A-F or P/NP) Transfer: CSU, UC (CC CHEM 1B) General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: SA)

CHEM 112—ORGANIC CHEMISTRY 1 5 Units
Prerequisite: Satisfactory completion of CHEM 102 or CHEM 103.
Nomenclature, structure, reactions and spectroscopy of carbon containing compounds. Laboratory emphasizes basic techniques of synthesis, purification, and identification of organic compounds. (A-F or P/NP) Materials fee required. Lecture/Laboratory. Transfer: CSU, UC General Education: (CSU-GE: B1, B3) (IGETC: SA)

CHEM 113—ORGANIC CHEMISTRY 2 5 Units
Prerequisite: CHEM 112.
A continuation of CHEM 112 with emphasis on alcohols, amines, carboxyls, carboxyls, and biologically important compounds. Involves special topics in organic reactions and syntheses. Lecture/Laboratory. Materials fee required. (Spring) Transfer: CSU, UC General Education: (CSU-GE: B1, B3) (IGETC: SA)

CHEM 142—PRE-GENERAL CHEMISTRY 3 Units
Corequisite: Concurrent enrollment in or satisfactory prior completion of MATH 90.
Intended to prepare students for General Chemistry with an emphasis on problem-solving using unit analysis. Includes topics on classification of matter, atomic and molecular structure, measurements and the metric system, chemical reactions and stoichiometry, aqueous solutions and fundamentals of acids and bases. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: SA)

CHEM 143—INTRODUCTORY COLLEGE CHEMISTRY 5 Units
Prerequisite: Eligibility for MATH 90.
Designed to meet the requirements for certain nursing, dental hygiene, physical therapy, home economics, agriculture and forestry programs (inorganic chemistry). Principles of chemistry including an introduction to organic chemistry. Uses the factor-label method of problem solving. Credit not granted to students who have completed CHEM 142. Lecture/Laboratory/Discussion. Materials fee required. Transfer: CSU, UC (CC CHEM 10) General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: SA)

CHEM 144—FUNDAMENTALS OF ORGANIC AND BIOCHEMISTRY 4 Units
Prerequisite: Satisfactory completion of CHEM 142 or CHEM 143.
Basic principles of organic and biochemistry. Uses inductive and deductive problem solving methods. Lecture/Laboratory. Materials fee may be required. (Spring) Transfer: CSU, UC (CC CHEM 11) General Education: (MJC-GE: A)(CSU-GE: B1, B3) (IGETC: SA)
CLART (Culinary Arts)

CLART 211 — FOOD SAFETY AND SANITATION  2 Units
Formerly listed as: CLART 311
Law and practices related to sanitation and safety in the food preparation industry. Four maximum completions. Materials fee required. (A-F or P/NP) Transfer: CSU (CC HPMGT 120)

CLART 301 — CULINARY ACADEMY 1  14 Units
An introductory course designed to familiarize the student with basic culinary skills development. The daily production will emphasize techniques of masting, grilling and brasing utilizing menus that reflect American regional cuisine. Introduction to stocks, soups, mother sauces, sauce derivatives, thickening agents, and flavoring agents. Identification and function, purchasing and receiving, and proper storage procedures of ingredients and products will be discussed. The baking module provides students with the opportunity to prepare breads, rolls, biscuits, muffins, pies, tarts and cookies. Field trips may be required. (A-F or P/NP) Fee for food supplies. Not offered every semester. (Fall)

CLART 302 — CULINARY ACADEMY 2  14 Units
Prerequisite: Satisfactory completion of CLART 301
Daily production will emphasize techniques of specialty desserts, pastries, garde manger, and advanced cooking techniques that reflect modern American and international cuisine. Areas of specialized studies include management and supervision, cost control, computers, menu planning and facility planning. Field trips may be required. (A-F or P/NP) Fee for food supplies. Not offered every semester. (Spring)

CHEM 150 — EXPLORING OUR CHEMICAL ENVIRONMENT  3 Units
The interaction of mankind and the environment from a chemical perspective. Basic chemical principles are developed in order to understand such items as conventional, nuclear, and alternative energy sources, air and water pollution, fertilizers, pesticides, food preservatives, genetic engineering, and medicines and drugs. Field trips may be required. Lecture. Transfer: CSU, UC (CC CHEM 20) General Education: (MUC-GE A) (CSU-GE B1)

CHEM 164 — INTRODUCTORY CHEMISTRY LABORATORY  2 Units
Corequisite: Concurrent enrollment in or prior satisfactory completion of CHEM 142 or CHEM 150.
Introductory concepts and techniques used in a chemistry laboratory. Recommended for liberal studies and other non-science majors. Topics include: scientific method, measurements, physical and chemical changes, data analysis, molecular compounds, chemical reactions and energy. No credit will be given for students who have completed CHEM 143 or CHEM 101. (A-F or P/NP) Materials fee required. Lect./Lab. Transfer: CSU, UC General Education: (MUC-GE A)(CSU-GE B3)

CLDDV (Child Development)

CLDDV 48A,B — FUNDAMENTAL COMMUNICATION SKILLS FOR CHILD DEVELOPMENT MAJORS  1-2 Units
Formerly listed as CLDDV 50A, B
Recommended for success: Enrollment in at least one of the Child Development courses
Emphasis on developing fundamental communication skills including reading comprehension, preparation of written assignments, and spoken communication specific to the terminology utilized in the field of child development. Credit in this course may not be used to satisfy Child Development requirements for graduation from Modesto Junior College. Class can be completed a maximum of four times, for a maximum of 8.0 units, combined between 48A and 48B. Lecture.

CLDDV 101 — INTRODUCTION TO EARLY CHILDHOOD EDUCATION  3 Units
Foundations of educational programs and preparation for entering the field of education. Study of philosophy and history of education, appropriate curriculum and environments for educational programs, principles for teachers in educational programs. Examine domains of human development, including physical, cognitive, social-emotional, and creative, with emphasis on but not limited to ages 0-6. Basic skill development in observation of children in educational settings. Introduction to state and federal requirements for educational programs. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 3)

CLDDV 103 — CHILD GROWTH AND DEVELOPMENT  3 Units
Basic principles of human development as they apply to infancy, childhood, and adolescence, including prenatal and birthing, physical, cognitive, social, emotional, and atypical development. Discussion of current developmental research and application. (A-F or P/NP) Lecture. Transfer: CSU, UC (CC CHILD 1) General Education: (MUC-GE B,E)(CSU-GE E)

CLDDV 104 — CHILD GROWTH & DEVELOPMENT - CONCEPTION THROUGH EARLY CHILDHOOD  2 Units
First half of CLDDV 103 - Basic principles of human development as they apply to infancy and childhood, including prenatal and birthing: physical, cognitive, social, emotional, and atypical development. Discussion of current developmental research and application. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MUC-GE B,E)(CSU-GE E)

CLDDV 105 — CHILD GROWTH & DEVELOPMENT - LATE CHILDHOOD THROUGH LATE ADOLESCENCE  2 Units
Recommended for success: Satisfactory completion of ENGL 50
Second half of CLDDV 103 - Basic principles of human development as they apply to late childhood through adolescence: physical, cognitive, social, emotional, and atypical development. Discussion of current developmental research and application. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MUC-GE B,E)(CSU-GE E)

CLDDV 107 — INTRODUCTION TO CHILD DEVELOPMENT CURRICULUM  3 Units
(Formerly listed as CLDDV 278)
Recommended for success: Satisfactory completion of ENGL 50
Study of appropriate play, aesthetic and learning experiences including program content, use of materials and equipment and guidance of children’s experiences in developmentally appropriate fashion; techniques of meeting physical needs of children. Principles of learning, models of curricular philosophies and programs and integration of domains of development will be integrated. Discussion of cultural contexts, variations in development and inclusion of children with special needs. Lecture. Transfer: CSU

CLDDV 109 — CHILD - FAMILY - COMMUNITY  3 Units
(Formerly listed as CLDDV 249)
Framework for understanding the development of and influences on young children within the context of the family, early care and education, school, peer group, community and media, including culture, religion, economics, politics, and change. Issues, challenges and concerns are explored as well as community resources and the importance of partnerships and advocacy. (A-F or P/NP). Lecture. Transfer: CSU (CC CHILD 22)
CLDDV 121—GUIDANCE OF YOUNG CHILDREN 3 Units
(Formerly listed as CLDDV 246)
Recommended for success: CLDDV 101, or CLDDV 103, or CLDDV 104 and CLDDV 105
Developing effective relationships with young children through positive guidance practices. Identification and application of appropriate guidance techniques. Lecture. 
Transfer: CSU

CLDDV 122—LEARNING ENVIRONMENTS FOR INFANTS AND TODDLERS 3 Units
Recommended for Success: Before enrolling in this course students are strongly advised to satisfactorily complete CLDDV 101 or CLDDV 103 or (CLDDV 104 and CLDDV 105.)
Development and evaluation of the physical and social learning environments for infants and toddlers including goals, curriculum, materials, state regulations, equipment, and interaction of children, staff, and families. (A-F or P/NP) Transfer: CSU

CLDDV 123—LEARNING ENVIRONMENTS FOR YOUNG CHILDREN 3 Units
(Formerly listed as CLDDV 247)
Recommended for success: Satisfactory completion of CLDDV 101, or CLDDV 103, or CLDDV 104 and CLDDV 105
Development and evaluation of the learning environment for young children including physical environment, curriculum, goals, materials, and equipment and including children with disabilities in a multicultural context. Exploration of the interaction of children, teachers, and families, and how those interactions affect programs and children's development. Lecture. (A-F and CR/NC) Transfer: CSU

CLDDV 125—INFANT AND TODDLER DEVELOPMENT AND CARE 3 Units
Prerequisite: Satisfactory completion of CLDDV 103 or (CLDDV 104 and CLDDV 105)
Infant and toddler developmental milestones and practices for stimulation and learning. Exploration and assessment of the infant and toddler curriculum and environment, family involvement, educational theory, and recent brain research concerning the first three years of life. Health, safety, nutrition, aspects of group care, and the review of Department of Social Services Regulation compliance in infant and toddler programs. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 25)

CLDDV 126 C,D,E—INCLUSION SPECIAL NEEDS PRACTICUM 3-5 Units
Prerequisite: Satisfactory completion of CLDDV 103.
Concurrent enrollment in or satisfactory prior completion of CLDDV 121.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Enrollment limited to those who can present evidence of TB clearance.
Child-centered, play-oriented approaches to student teaching experience under guided supervision with toddlers and preschool age children with an identified disability. Build a comprehensive understanding of children and families through individualized, relationship-based (DIR Floortime) caregiving practice including the development of relationships with families. Build connections between theory and practice, develop professional behaviors, practice positive and nurturing guidance techniques, and utilize facilitation-based teaching through authentic observation, documentation, screening, and assessment while designing, facilitating and evaluating curriculum that support an inclusive and culturally diverse environment. Will support IEP goals and may include participation in an educational meeting. CLDDV 130 - Supervised Field Experience - may NOT be used as a substitute for lab practicum. CLDDV 130 - Supervised Field Experience - may NOT be used as a substitute for lab practicum. Course is repeatable – three completions allowed. Field trips may be required. Applicable to the associate degree (A-F or P/NP) Lecture/Laboratory. Transfer: CSU (CC CHILD 16)

CLDDV 128B,C,D,E—PRESCHOOL PRACTICUM 2-5 Units
(Formerly listed as CLDDV 248)
Prerequisite: Satisfactory completion of CLDDV 101, or CLDDV 103, or CLDDV 104 and CLDDV 105;
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50 and CDDV 121.
Enrollment limited to those who can present evidence of TB clearance.
Child-centered, play-oriented approaches to student teaching experience under guided supervision with preschool-aged children who may have a disability. Build a comprehensive understanding of children and families through individualized, relationship-based caregiving including the development of relationships with families. Build connections between theory and practice, develop professional behaviors, practice positive and nurturing guidance techniques, and utilize facilitation-based teaching through authentic observation, documentation, screening, and assessment while designing, facilitating and evaluating curriculum that support an inclusive and culturally diverse environment. Will support IEP goals and may include participation in an educational meeting. CLDDV 130 - Supervised Field Experience - may NOT be used as a substitute for lab practicum. CLDDV 130 - Supervised Field Experience - may NOT be used as a substitute for lab practicum. Course is repeatable – three completions allowed. Field trips may be required. Applicable to the associate degree (A-F or P/NP) Lecture/Laboratory. Transfer: CSU (CC CHILD 16)

CLDDV 130B,C,D—SUPERVISED FIELD EXPERIENCE 2-4 Units
(Formerly listed as CLDDV 260)
Fingerprint and TB clearances are required.
Designed to combine experience in an infant, toddler, preschool, school-age care facility, or K-12 classroom with an expansion of skills or knowledge acquired at a site of employment on a paid or volunteer basis. Provides an orientation to the structure of work experience education and develops specific knowledge and skills related to employment situations through the accomplishment of goals. 75 paid hours or 60 volunteer hours of related work experience are required for the 2-unit class; 150 paid hours or 120 volunteer hours of related work experience are required for the 3-unit class, 225 paid hours or 180 volunteer hours of related work experience are required for the 4-unit class. This course may NOT be used as a substitute for lab practicum. Class can be completed a maximum of four times, for a maximum of 16.0 units, Lecture / Field Experience. Transfer: CSU

CLDDV 150—ADMINISTRATION OF CHILDREN’S PROGRAMS 3 Units
(Formerly listed as CLDDV 230)
Prerequisite: Satisfactory completion of CLDDV 103, or CLDDV 104 and CLDDV 105
Laws governing private and public programs serving young children in California. Aspects of resource issues, resolving group conflicts and working with advisory boards. Designed to provide knowledge of methods and principles for working with adults in a supervisory capacity in Early Care and Education settings. Course is not repeatable. (Formerly listed as CLDDV 250)

CLDDV 151—ADVANCED ADMINISTRATION OF CHILDREN’S PROGRAMS 3 Units
(Formerly listed as CLDDV 270)
Prerequisite: Satisfactory completion of CLDDV 150
Management and supervision in Early Care and Education programs. Includes strategic planning, group dynamics, supervision of staff and volunteers, development of motivation and morale, leadership and management skills, functions of personnel, interview skills, evaluations, human resource issues, resolving group conflicts and working with advisory boards. Designed to provide knowledge of methods and principles for working with adults in a supervisory capacity in Early Care and Education settings. Course is not repeatable. Field trips may be required. (Formerly listed as CLDDV 248) Lecture/Transfer: CSU (CC CHILD 31)

CLDDV 154—ADULT RELATIONSHIPS AND MENTORING IN SCHOOLS 2 Units
(Formerly listed as CLDDV 264)
Prerequisite: Satisfactory completion of CLDDV 101; CLDDV 103, or CLDDV 104 and CLDDV 105
Impact of staff interaction on children and adults in the classroom environment. Roles and functions of adults as professionals. Three completions allowed. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU
CLDDV 160—ATYPICAL DEVELOPMENT 3 Units
(Formerly listed as CLDDV 277)
Recommended for success: ENGL 50; CLDDV 103, or CLDDV 104 and CLDDV 105
Examines the interaction of genetic, biological, and environmental influences in the prenatal, natal, and postnatal environment that contribute to the development of the atypical child. Identification of a variety of special needs in children from birth to 12 years of age. Factors influencing development will be explored including family, community, and culture as the child is included in all environments. Lecture. Transfer: CU General Education: (MUC-GE: B)

CLDDV 163—WORKING WITH CHILDREN WITH SPECIAL NEEDS 3 Units
Introduction to inclusion of children with special needs, from infancy to adolescence in the school and community. Includes laws and policies. Emphasis on cognitive, social, emotional, and physical development for the child with disabilities in care and educational settings. Collaboration with parents as partners and methods for working with professionals. Lecture. Transfer: CSU (CC CHILD 19)

CLDDV 165—CHILDREN AT RISK 3 Units
Recommended for Success: Satisfactory completion of ENGL 50
Examines risks for conditions for prenatal, infants, and young children including prenatal drug exposure, very low birth weight, serious congenital infection, congenital anomaly, low Apgar scores at birth, and other potential neurologic problems. Introduces the characteristics and effects of major childhood stress, including parental divorce and remarriage, parental illness and death, childhood illness and disability, child abuse and family violence, and parental incarceration. Field trips may be required. Lecture. Transfer: CSU

CLDDV 166—ADHD: IDENTIFY, ASSESS, INTERVENTIONS 1 Unit
Basic description of Attention Deficit Hyperactivity Disorder, causes, identification, assessment, and treatments. (A-F or P/NP). Transfer: CSU

CLDDV 167—OBSERVATION AND ASSESSMENT 3 Units
Prerequisites: Satisfactory completion of CLDDV 103, or CLDDV 104 and CLDDV 105, or CLDDV 245
Recommended for Success: Satisfactory completion of ENGL 50
Observation as a means of assessing developmental levels of infants, young and school age children. Introduction of various informal, formal, normed, standardized, and valid assessment and screening tools. Integration of observation techniques to perform reliable screenings and assessments to create a portfolio to be presented to parents. Field trips may be required. Lecture. Transfer: CSU

CLDDV 168—AUTISM 1: DESCRIPTION & IDENTIFICATION 1 Unit
Basic description of Autism, the Autistic spectrum, causes and assessment. (A-F or P/NP). Transfer: CSU

CLDDV 169—AUTISM 2: INTERVENTIONS & TREATMENTS 1 Unit
Overview of major interventions and treatments for Autism Spectrum Disorders. (A-F or P/NP) Transfer: CSU

CLDDV 170—AUTISM 3: DIR FLOORTIME APPROACH 1 Unit
Overview of DIR (Developmental, Individualized, Relationship-Based) Floor Time approach to developmental challenges encouraging intellectual and emotional growth. Greenspan's renowned approach is presented and studied with detailed explanation. May be completed up to 4 times. (A-F or P/NP) Transfer: CSU

CLDDV 173—AUTISM: OVERVIEW AND TREATMENT 3 Units
Basic concepts of autism. Topics include description, identification, interventions and treatments, and DIR Floor Time approach. May be completed up to 4 times. (A-F or P/NP). Transfers: CSU

CLDDV 175—STEP-PARENTING: HEALTHY, HAPPY PARENTING 1 Unit

CLDDV 201—HEALTH AND SAFETY PRACTICES 3 Units
IN PROGRAMS FOR CHILDREN
Universal health precautions and other health and safety practices for children's programs. Health and safety requirements mandated by county and state, including injury prevention, infant and child first aid and CPR (satisfactory completion will earn student the Red Cross certificates in First Aid and CPR), prevention of infectious disease, caring for ill children, and recognizing signs of child abuse. Materials fee required. Lecture. Transfer: CSU

CLDDV 231—OVERVIEW OF FAMILY CHILD CARE 3 Units
(Formerly listed as FAML 331)
Selected topics related to family child care including, but not limited to, securing a license from California Department of Social Services, interpersonal relations, business management, program development, policy formulation, health, safety, nutrition, food practices, child guidance, and environmental maintenance, including utilization of a rating schedule. Lecture. Transfer: CSU

CLDDV 232—HEALTHY CAREGIVER 3 Units
(Formerly listed as FAML 330)
Selected topics related to the professional growth of the family child care provider including interpersonal skills, communication styles, prevention of burn-out, and strategies for career success. Lecture. Transfer: CSU

CLDDV 262—DIVERSITY IN EDUCATIONAL SETTINGS 3 Units
Formerly listed as “Diversity in Early Childhood Education”
Recommended for success: Before enrolling in this course, students are strongly advised to complete ENGL 50.
Examines the increasing diversity of society, educational environment, and social interactions in the classroom. The theoretical framework of awareness, knowledge, and skill is used to investigate forms of discrimination that permeate educational practices and society, and how these processes impact the work with children and their families. Culturally relevant materials and anti-bias strategies needed to integrate multicultural goals into the learning environment and curriculum are explored. (A-F or P/NP). Lecture. Transfer: CSU General Education: (MUC-GE:B), (CSU-GE: D7)

CLDDV 266—MENTOR SEMINAR ½ Unit
Beginning Early Childhood Mentors attend seminars to explore issues related to their role as supervisors of early childhood student teachers. Seminar content will be individualized to meet the needs of each mentor. Class can be completed a maximum of four times, for a maximum of 2.0 units. Lecture. Transfer: CSU

CLDDV 267—DIRECTOR SEMINAR 1 Unit
Directors, site supervisors and other administrators of early childhood programs attend monthly seminars to explore issues related to professional duties. Seminars will include quality improvement efforts, advocacy, supervision and mentoring of colleagues. Seminar content will be individualized to meet the needs of participants. Class can be completed a maximum of four times, for a maximum of 4.0 units. Lecture. Transfer: CSU

CLDDV 274—EARLY LITERACY 3 Units
Research-based principles and practice for early literacy, development of beginning reading, writing, speaking, listening, and thinking in an early childhood education setting. (A-F or P/NP) Lecture. Transfer: CSU

CLDDV 279 — HEADSUP! READING 1, 2, 3 3 Units
Research-based principles and practices for providing children birth through age 5 a strong foundation in early reading and writing within a developmentally appropriate approach. Lecture. Transfer: CSU

CLDDV 280 — SCHOOL- AGE DEVELOPMENT 3 Units
(Formerly listed as CLDDV 275)
A study of the developing child during the school-age years. Developmental characteristics of school-age children, influences on behavior and learning, and the fundamentals of planning and implementing curriculum in programs serving school-age children and their families. Lecture. Transfer: CSU General Education: (MUC-GE:B)(CC CHILD 27)

CLDDV 281 – SCHOOL-AGE PROGRAM AND CURRICULUM 3 Units
(Formerly listed as CLDDV 276)
The fundamentals of planning, implementing, and evaluating curriculum for programs serving school-age children and their families. Developing and providing age appropriate activities, environment, and relationships in the context of an integrated and active curriculum. Lecture. Transfer: CSU General Education: (MUC-GE:B)

CLDDV 290A,C—BRAIN DEVELOPMENT THROUGH MUSIC AND MOVEMENT ACTIVITIES 3 Units
(Formerly listed as CLDDV 365)
Recommended for Success: Satisfactory completion of ENGL 50, CLDDV 103, or CLDDV 104 and CLDDV 105
The brain and its connection to motor skill development in young children. Non-competitive group games, movement programs, and educational fitness. Lecture. Transfer: CSU
CLDDV 291 — CREATIVE ACTIVITIES FOR YOUNG CHILDREN 3 Units
(Formerly listed as CLDDV 364)
Recommended for Success: Satisfactory completion of ENGL 50, CLDDV 103, or CLDDV 104 and CLDDV 105
Develop, implement, and analyze creative experiences in the young child's learning process.
Lecture. Transfer: CSU

CLDDV 292 — MATH AND SCIENCE CURRICULUM FOR YOUNG CHILDREN 3 Units
Recommended for Success: Satisfactory completion of ENGL 50, CLDDV 103, or CLDDV 104 and CLDDV 105
Study of math and science exploration by young children. Evaluation and development of appropriate math and science activities and materials. Discussion of variations in developmental levels, inclusion of children with special needs, and respect of cultural differences. Lecture. Transfer: CSU (CC CHILD 12, 13)

CLDDV 293 — MUSIC, BIRTH TO K: THEORY AND PRACTICE 3 Units
Also offered as MUST 103.
Recommended for Success: Before enrolling in this class students are strongly advised to possess the following basic music skills: ability to read music (note names, melody and rhythm) and define and apply basic music vocabulary, or have successfully completed one or more of the following courses; MUST 101, MUSA 121, MUSA 161, MUSA 151, MUSA 153. Introduction to the methods of teaching music to children (birth to Kindergarten). Theories on the developing mind and the benefit of musical understanding to musicianship as well as overall development. Kodaly, Orff, Dalcroze and other methods will be covered. Relationship of child development theory and developmentally appropriate practice. Study of classroom implementation process. First in a two course sequence. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU.

CLDDV 294 — MUSIC, BIRTH TO K: APPLICATION 3 Units
Also offered as MUST 106.
Prerequisite: Satisfactory completion of CLDDV 293/MUST 103. Application of the methods of teaching music to children (birth to Kindergarten) at an infant/toddler or preschool center with instructor supervision. Students will continue to draw connections between basic music skills, methods of teaching theories, child development, and developmentally appropriate practice. Second in a two course sequence. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU.

CLDDV 357 — CURRENT ISSUES: CHILD CARE DIRECTORS 1 Unit
Study of current issues and planning decisions facing directors of child care programs, examination and analysis of new and proposed state regulations. Lecture.

CLDDV 366 — CURRENT ISSUES: INFANT/TODDLER TEACHERS 1 Unit
Study of current issues in creating infant/toddler environments, evaluating development, and parent interaction. Lecture.

CLDDV 367 — CURRENT ISSUES: PRESCHOOL TEACHERS 1 Unit
Study of current issues in creating preschool environments, evaluating development, and parent interaction. Lecture.

CLDDV 369 — CHILDREN AT RISK 1 Unit
Understanding the impact of prenatal exposure to drugs and violence on children and families. Strategies to assist teachers, family child care providers, foster parents and other professionals in meeting needs of children prenatally exposed to drugs. Lecture.

CLDDV 370 — ISSUES IN CHILDREN'S NUTRITIONAL HEALTH 2 Units
Also offered as FDTR 370
Overview of entry level skills in the child nutrition program including sanitation, record keeping, and food production. Role and responsibilities in providing menus for children and youth which comply with budgetary parameters and meet their nutritional, social and emotional needs with sensitivity to culturally diverse foods. Lecture.
CMPET 269 — NETWORK + CERTIFICATION TRAINING LAB  1 Unit

Concurrent Enrollment: Satisfactory completion of CMPSC 263
Recommended for Success: Satisfactory completion of any introductory computer course.
Also offered as CMPSC 269.

Network + is quickly becoming the standard for introductory-level industry certification. Designed for those interested in a career in network support, this vendor-neutral certification takes the student through installing and configuring a network client. This laboratory course along with the CMPSC 263 course provides preparation for CompTIA's Network+ certification exam. Extensive network lab projects will be required. Field trips may be required. Laboratory. Materials fee required.

Transfer: CSU

CMPET 302 - INTRODUCTION TO INDUSTRIAL NETWORKING WITH DEVICECET  1 Unit

Instruction on DeviceNet which is an open architecture system of smart sensors, controllers, and I/O all linked together on a common network and controlled by a PC that may or may not be networked to other PC's. Exploration of device level hardware and software. Lecture.

CMPGR (Computer Graphics Applications)

CMPGR 201 — ANIMATION: A GLOBAL VIEW  3 Units

OF ART IN MOTION

History of animation and its relationship to societies and cultures. Explores the development of animation from its earliest attempts in prehistoric times through the present day integration of technology. Strategies for production are presented, including animation techniques, design, layout, editing, timing, composition, color, lighting, music, sound effects, voice, story, concept, content, theme, historical relationship, social context, ethical context, purpose, audience, and philosophy. Field trips may be required. Lecture. Transfer: CSU General Education: (MJC GE- C)

CMPGR 202 — INTRODUCTION TO COMPUTER GRAPHICS  3 Units

Also offered as ART 102.

An introductory course in the field of computer graphics using various applications and tools. Topics explored include, but are not limited to, original image creation, photographic editing, scanning, printing, two-dimensional animation, sound digitizing pens, mouse, and digital camera. Field trips may be required. Materials fee required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC General Education: (CSU GE- C1)

CMPGR 213—APPLIED COMPUTER GRAPHICS  3 Units

Recommended for Success: Satisfactory completion of ART 102/CMPGR 202.
Also offered as ART 103.

Concepts and techniques in computer graphics as related to fine and applied art applications. Field trips may be required. Materials fee required. Lecture/Laboratory. Transfer: CSU

CMPGR 214—DIGITAL CAPTURE FOR COMPUTER GRAPHICS  3 Units

Recommended for Success: Satisfactory completion of any previous computer graphics course.

Explore digital capture and image editing techniques using such hardware devices as scanners, capture boards, digital cameras and video. Students must have access to a digital camera. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMPGR 215—BUSINESS PRESENTATION GRAPHICS  3 Units

Recommended for Success: Satisfactory completion of any introductory computer science class.

The use of a computer as a vehicle for preparing, producing, and controlling the presentation of visuals within the business environment. Both qualitative and quantitative data and selection of appropriate visual display format and media will be covered. Hardware and peripheral equipment as well as commercially available software will be covered. Emphasis is placed on the use of existing commercially available software with "hands on" experience being provided in an open lab environment. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU (CC CMPSC 11)

CMPGR 216—3D GRAPHICS AND ANIMATION  3 Units

Graphic animation techniques utilizing microcomputers and 3D software. 3D modeling, scene composition, materials editing, object and camera movement, character development and storyboarding will be explored. Students will have intensive hands-on experience with IBM or Mac graphic systems and related peripheral devices. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMPGR 217—COMPUTER ILLUSTRATION SOFTWARE  3 Units

Recommended for Success: Satisfactory completion of CMPGR 202 or ART 102

Introduction to illustration software as applied to visual and data presentation. Explores the techniques and tools used by artists, designers, and illustrators to produce artwork for print, publishing, multi-media graphics, web page design or illustration. Hands-on experience with microcomputer graphics systems required. Field trips may be required. Materials fee required. Lecture/Laboratory.

Transfer: CSU

CMPGR 219—COMPUTER GRAPHICS PORTFOLIO REVIEW  1 Unit

Prerequisite: This course follows the completed courses of the Computer Graphics majors/ certificate requirements.

Also offered as ART 119.

Prepares the student majoring in or receiving a certificate in Computer Graphics with the necessary visual and business skills to develop a portfolio, emphasizes the creative and applied business needs for individuals entering the professional field of Computer Graphics. Field trips may be required. Lecture/Laboratory. (A-F Only) Transfer: CSU

CMPGR 225—3D GRAPHICS AND ANIMATION  3 Units

Graphic animation techniques utilizing microcomputers and 3D software. 3D modeling, scene composition, materials editing, object and camera movement, character development and storyboarding will be explored. Students will have intensive hands-on experience with IBM or Mac graphic systems and related peripheral devices. Field trips may be required. Two maximum completions. (A-F Only) Lecture/Laboratory Transfer: CSU

CMPGR 226—3D GRAPHICS AND ANIMATION  3 Units

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPGR 225.

Continued development of 3D modeling and animation skills. Storyboarding, integration of 3D software with other industry standard applications. Finished animation production techniques. May be completed two times. (A-F Only) Lecture/Laboratory.

Transfer: CSU

CMPGR 235—IMAGE MANIPULATION SOFTWARE  3 Units

Recommended for Success: Satisfactory completion of a previous course in Computer Graphics.

Introduction to the techniques and technology of digital image capture and imaging manipulation software. Field trips may be required. Lecture/Laboratory. Materials fee required. Two maximum completions. Transfer: CSU

CMPGR 236—ADVANCED PHOTOSHOP APPLICATIONS  3 Units

Prerequisite: Satisfactory completion of CMPGR 235 or equivalent skills.

Advanced skills in Adobe Photoshop including layout and publication, image processing, web skills and illustration. Students will have extensive hands-on experience with IBM or Mac graphic systems and related peripheral devices. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMPGR 252—DESKTOP PUBLISHING FOR COMPUTER GRAPHICS  3 Units

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPGR 202 or CMPSC 274 or CMPSC/OFADM 231.

Desktop publishing concepts with hands-on training in the use of computers, printers, scanners, and various page-layout applications; text and graphics will be integrated into documents and publications typically used in a range of computer graphics disciplines. (A-F Only) Lecture/Laboratory.

Transfer: CSU

CMPGR 262—EXPLORING THE WORLD WIDE WEB  1 Unit

Introduction to the World Wide Web (Web). Use of a graphical browser for accessing, viewing, and saving Web documents. Use of E-mail, search engines and bookmarks. Current and emerging Web technologies, and the impact on education, business, organizations, and our professional and personal lives. Lecture/Laboratory. Materials fee required. (MJC Activities) Transfer: CSU (CC CMPSC 10)
CMGPR 263 — INTERNET LITERACY 3 Units
Recommended for Success: Satisfactory completion of any introductory computer class.
Provides the conceptual background and the online skills needed to become Internet literate. Covers internet services: e-mail, listserv, newsgroups, FTP, telnet and the World Wide Web (WWW). Emphasis will be placed on the WWW, types of access (ISP), usage, software (browsers and other support software) and internet etiquette in a global environment. Introduction to publishing and multimedia. Usage of search engines to conduct research and copyright issues and bibliographic style. Reflects on the impact of emerging technologies on the future of commerce and communications as well as societal issues. Lecture/Laboratory. Materials fee required. Transfer: CSU.

CMGPR 264 — PUBLISHING ON THE WORLD WIDE WEB 3 Units
Recommended for Success: Satisfactory completion of CMGPR 262, CMGPR 201

CMGPR 265 — MULTIMEDIA ON THE WORLD WIDE WEB 3 Units
Prerequisite: Satisfactory completion of CMGPR 264 or 287
Intermediate course covering multimedia components of the World Wide Web. Development with animation, sound and video. Emphasis on further development of programming techniques and skills for advanced features for Web pages. Extensive hands-on lab experience. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU
General Education: (MJC GE-D)

CMGPR 266 — DREAMWEAVER IN WEB SITE DESIGN 3 Units
Recommended for Success: Satisfactory completion of CMGPR 202 or ART 102.
Macromedia’s Dreamweaver web design software, including templates, libraries, Cascading Style Sheets, and FTP Strategies for creating intuitive and accessible web sites such as audience considerations, site map, and navigational building, and testing. Lecture/Laboratory. Transfer: CSU

CMGPR 268 — FLASH: WEB GRAPHICS AND ANIMATION 1 3 Units
Recommended for Success: Satisfactory completion of CMGPR 202 or ART 102.
Introduction to Macromedia’s Flash. Covers the tools and concepts of Flash and its many interactive possibilities and functions, including drawing, image, text, animation, sound, and action-scripting integration. Explores the strategies for creating intuitive and accessible Flash productions from start-to-finish, such as audience considerations, site map and navigation building, and the effective use of content and animation, output, optimization and testing. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMGPR 269 — FLASH: WEB GRAPHICS AND ANIMATION 2 3 Units
Prerequisite: Satisfactory completion of CMGPR 268
In-depth look into how Flash is effectively used by real-world interactive designers and developers. Explore advanced Flash concepts and tools such as dynamic text, tell-targeting movie clips, drop-down menus, scrolling text, selectable masks, embedded video, streaming and event sound, and the integration of Flash with HTML. Gain an understanding of how to use Action Scripting for more powerful interactivity and animation by exploring the use of variables, properties, expressions, functions, and operators. Bring together the Flash methods learned into the creation of a final, online portfolio presentation. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMGPR 284 — DESKTOP VIDEO ANIMATION 3 Units
Recommended for Success: Satisfactory completion of CMGPR 202 or ART 102
Concepts and techniques utilizing computers and related technologies, with the video media. Video image capture enhancement, recording and exportation for use in graphic image production/preparation, computer animation, web and CD will be explored. Students will have intensive “hands on” experience on the MAC or IBM graphic system and related video peripheral devices. Field trips may be required. Lecture/Laboratory. Materials fee required for special printer/plotter paper, inks, and film. Transfer: CSU (MJC Activities)

CMGPR 287 — INTRODUCTION TO MULTIMEDIA 3 Units
Recommended for Success: Satisfactory completion of Basic Computer literacy course such as CMGPR 201.
Introduction to multimedia software and hardware on microcomputers. Students will have intensive "hands on" experience working with a variety of media such as text, numbers, sound, music, graphics, animation and video. Techniques of media capture, generation and editing and subsequent interactive multimedia development will be explored. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMGPR 288 — INTERMEDIATE MULTIMEDIA 3 Units
Prerequisite: Satisfactory completion of CMGPR 287
Continuation of Multimedia concepts and applications. Working with a variety of media forms such as text, numbers, sound, music, graphics, animation and video. Emphasis is placed on further development of scripting and interactive design. Discussion of needs assessment, design issues, implementation and presentation will be combined with "hands on" projects. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU.

CMGPR 298A, B — SPECIAL TOPICS IN COMPUTER GRAPHICS 1, 2 Units
Prerequisite: Varies with topic.
Participation in discussion, analysis, and evaluation of a special topic in computer graphics, microcomputer applications, and related technologies. Topic to be announced in class schedule. Field trips may be required. Four maximum completions for a maximum of 6 units in any combination. Lecture or Lecture/Lab. Transfer: CSU

CMGSC (Computer Science)

CMSC 103 — SYMBOLIC LOGIC 3 Units
Also offered as PHIL 103.
An introduction to modern deductive logic, includes sentential and predicate logic with identity theory and definite descriptions. Lecture. Not offered every semester. Transfer: CSU, UC (CC CMPSC 1) General Education: (MJC GE-D2) (CSU GE-A3)

CMSC 201 — GENERAL COMPUTER LITERACY 3 Units
Survey of the functions and uses of computers in business, education, industry, and science with emphasis on the personal computer; study of computers and peripheral equipment as integrated systems; exploration of the impact of computers on society; introduction to problem-solving and applications programming techniques; experience with popular internet and application packages on the laboratory microcomputers. (A-F or P/NP) Approved for hybrid, telecourse and on-line instruction. Transfer: CSU, UC (CC CMPSC 1) General Education: (MJC GE-D2)

CMSC 202 — BUSINESS INFORMATION SYSTEMS 3 Units
Prerequisite: Satisfactory completion of BUSAD 201 or 310 and CMSC 201.
Introduction to design, development, and use of information system models to improve managerial decision making. Study of information systems hardware and software, advanced computer codes, systems analysis and planning; systems security; application development using decision support systems; and expert systems. Lab work will focus on Internet research and advanced spreadsheet, database, and word processor functions for solutions to business problems. Field trips may be required. Lecture: Laboratory arranged. Materials fee required. Transfer: CSU, UC (TCU IS 120)

CMSC 203 — TECHNICAL COMPUTER LITERACY 3 Units
Concepts and techniques for using microcomputer applications. Instruction and extensive practice in Windows, word processing, spreadsheets, database management, Internet basics, file transfer between applications, and related auxiliary applications. (A-F or P/NP). Materials fee required. Transfer: CSU General Education: (MJC GE-D)
CMPSC 204—INTRODUCTION TO PROGRAMMING  3 Units
Recommended for Success: Satisfactory completion of MATH 90 or qualification by MIC assessment process.
The first course in computer programming for students with little or no programming experience. General computer literacy issues describing computer hardware, software development, operating systems, and telecommunications will be covered. Beginning problem-solving, analysis, documentation, algorithm design, control structures, program coding, using BASIC and C++, file input and output, and program testing and program maintenance will be stressed. Field trips may be required. Lecture/Laboratory. Materials fee required. (P/NP Only) Transfer: CSU, UC

CMPSC 205—PROBLEM SOLVING AND PROGRAMMING 1  3 Units
Prerequisite: Satisfactory completion of CMPSC 204
Designed for computer science transfer majors but open to all students. Emphasizes algorithm development and problem analysis skills for computer science. Software engineering skills will be developed for both procedural programming and object-oriented programming. Solution algorithms will be implemented using either the C++ or Java programming languages. Extensive programming projects demonstrating problem solving and implementation skills will be assigned throughout the semester. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (TCSU CSCI 110) (CC CMPSC 22)

CMPSC 206—INTRODUCTION TO UNIX/LINUX SYSTEMS AND PROGRAMMING  3 Units
Recommended for Success: Satisfactory completion of CMPSC 204
Introduction to the UNIX operating system using Linux. Coverage will include using UNIX shells, commands, the role of the system administrator, the UNIX file system, editors, file processing, shell programming utilities, PERL and CGI programming, C and C++ programming, and recent developments in UNIX and the Windows graphical user interface. Extensive hands-on experience using UNIX operating system and programming within the UNIX environment. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (CC CMPSC 9)

CMPSC 213—PROGRAMMING WITH VISUAL BASIC  3 Units
Prerequisite: Satisfactory completion of CMPSC 204
Concepts in programming a computer using the language called Visual Basic. Emphasis on structured design, graphical user interfacing, and documentation. Includes user screen development, control constructs, array processing, elementary file processing, and database access. Extensive interaction with computers will be expected. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (CC CMPSC 28) General Education: (MUC-GE: D2)

CMPSC 214—ADVANCED VISUAL BASIC  3 Units
Prerequisite: Satisfactory completion of CMPSC 213 or equivalent.
Advanced concepts of computer programming using Microsoft Visual BASIC. Students will program user interfaces with Microsoft Word, Excel and Access. They will also create Internet and general business interfaces. Graphics and game structure applications will be covered. Lecture/Laboratory. (Spring) Transfer: CSU, UC

CMPSC 216 - JAVASCRIPT PROGRAMMING FOR THE INTERNET  3 Units
Prerequisite: Satisfactory completion of CMPGR 264 and CMPSC 204
Developing World Wide Web applications with HTML and JavaScript. An introduction to creating interactive HTML documents through manipulation of the WWW DOM (Document Object Model). Designing Web-based applications, validating and processing user input, creating dynamic documents utilizing DHTML. Extensive programming projects demonstrating problem solving and implementation skills will be assigned throughout the semester. Hands-on computer assignments required. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC

CMPSC 220 – SQL SERVER ADMINISTRATION  3 Units
Prerequisite: Satisfactory completion of CMPSC 275
Provides students with the knowledge and skills required to install, configure, administer, and troubleshoot Microsoft SQL Server client/server database management system version 7.0 or higher. Two maximum completions. Lecture/Laboratory. Materials fee required. Not offered every semester. Transfer: CSU

CMPSC 225 – SQL DATABASE IMPLEMENTATION  3 Units
Prerequisite: CMPSC 275
Provides students with the technical skills required to implement a database solution with SQL Server. Topics include: architecture, key features of SQL Server, reviewing SQL Server programming tools, Transact-SQL, creating databases, data integrity, planning and creating indexes, advanced query techniques, summarizing data, managing transactions and locks, implementing views, stored procedures and triggers, working with distributed data, and advanced text queries. Two maximum completions. Lecture. Laboratory arranged. Materials fee required. Not offered every semester. Transfer: CSU

CMPSC 231—INTERMEDIATE WORD PROCESSING  3 Units
Recommended for Success: Satisfactory completion of OFADM 203 and (OFADM 330 or CMPSC 274.)
Also offered as OFADM 231.
Intermediate word processing features such as mail merge, macros, styles, graphics, tabs, and sorts. Features will be applied in creating business documents. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU (CC OFTEC 141)

CMPSC 241—ASSEMBLY LANGUAGE PROGRAMMING  3 Units
Prerequisite: Satisfactory completion of CMPSC 204
Designed for Computer Science transfer majors, but open to all students. Introduction to microcomputer hardware architecture and assembly language programming. A microprocessor instruction set will be examined in detail. Memory addressing modes, logic and control, data representations and manipulation, table processing, and device I/O control processes will be examined. Macros, program modules, and interrupts will be studied. Extensive hands-on computer projects implementing course objectives will be assigned. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (CC CMPSC 40) General Education: (MJC-GE: D2)

CMPSC 261—PROBLEM SOLVING AND PROGRAMMING 2  3 Units
Prerequisite: Satisfactory completion of CMPSC 205 or ACM CS-1 equivalent.
Introduction to simple data structures and object-oriented programming. Includes more advanced features of high-level languages such as C++ or Java. Continued emphasis on good programming methodologies and problem solving techniques and analysis. Programming problems implementing lists, stacks, queues, and trees will be emphasized. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (TCSU CSCI 120) (CC CMPSC 24) General Education: (MJC-GE: D2)

CMPSC 263—NETWORKING ESSENTIALS  3 Units
Prerequisite: Satisfactory completion of an introductory computer class.
Concepts of networking technologies. Includes design, media, hardware, standards, protocols, architectures, operations, administration, support, distributed networks, WANs, troubleshooting, and the Internet. Designed to help individuals prepare for Microsoft Certification Exam #70-058. Hands-on computer assignments required. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMPSC 264—WINDOWS SERVER OS  3 Units
Formerly listed as "Microsoft Windows 2000 Server"
Prerequisite: Satisfactory completion of CMPSC 263 and 204
Technical study of the Windows Server operating system. Includes server hardware, installation, configuration, clients, management, network protocols, active directory and security, remote access and virtual private networks, interoperability, Internet and intranets, monitoring, tuning, and troubleshooting. Hands-on computer assignments required. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. (A-F or P/NP) Transfer: CSU General Education: (MJC-GE: D)

CMPSC 269—NETWORK AND CERTIFICATION TRAINING LAB  1 Unit
Concurrent Enrollment: CMPSC 269
Recommended for Success: Satisfactory completion of any introductory computer course
Also offered as CMPET 269.
Network + is quickly becoming the standard for introductory-level industry certification. Designed for those interested in a career in network support, this vendor-neutral certification takes the student through installing and configuring a network client. This laboratory course along with the CMPSC 263 course provides preparation for CompTIA Network+ certification exam. Extensive network lab projects will be required. Field trips may be required. Laboratory. Materials fee required. Transfer: CSU
CMPSC 270—UNDERSTANDING DATA COMMUNICATIONS 3 Units
How data communications systems and their various hardware and software components work. Includes communication between personal computer systems, database services, electronic bulletin boards, and the Internet. Hands-on computer assignments required. Lecture/Laboratory. Materials fee required. Transfer: CSU

CMPSC 275—DATABASE MANAGEMENT SYSTEMS/MICROCOMPUTERS 3 Units
Introduction to database management systems (DBMS). Instruction on the design, setup and maintenance of a DBMS. Applications in inventory control, mailing lists, report construction and format, sorting and indexing operations, general file relationships and information retrieval. Hands-on experience using a microcomputer. Emphasis on Microsoft Access or similar DBMS software. Lecture/Laboratory. Materials fee required. Transfer: CSU (CC: CMPSC 35)

CMPSC 276—INTRODUCTION TO DATA WAREHOUSING 3 Units
Formerly listed as: CMPSC 276 Database Programming
Prerequisite: Satisfactory completion of CMPSC 275 or 225 or 220
Introduction to data warehousing. Emphasizes heterogeneous database design, optimization and reporting. Use of a multi-vendor environment such as Oracle, SQL Server, MySQL, or PostgreSQL. Maximum two completions. (A-F or P/NP) Materials fee required. Transfer: CSU

CMPSC 278—SPREADSHEET SOFTWARE 3 Units
Recommended for Success: Any introductory computer class.
Introduction to spreadsheet software. Spreadsheet analysis, design, testing, and documenting will be covered. Data entry, data management, graphing and keystroke macros will be emphasized. Applications in various areas will be explored with emphasis in business, professional and educational use. Hands-on experience using a microcomputer. Emphasis on Microsoft Excel or similar spreadsheet application. Lecture/Laboratory. Materials fee required. Transfer: CSU (CC: CMPSC 30)

CMPSC 279—SPREADSHEET DESIGN AND PROGRAMMING 3 Units
Prerequisite: Satisfactory completion of CMPSC 278
Uses current spreadsheet macros and command languages to build application programs for small businesses. Emphasizes design concepts, structured programming techniques, and documentation techniques. Graphics and database management capabilities will be explored along with ancillary and related enhancement programs. Lecture. Laboratory arranged. Materials fee required. Transfer: CSU

CMPSC 281—ADVANCED NETWORKING & SECURITY 3 Units
Formerly listed as: "Windows 2000 Security"
Prerequisite: Satisfactory completion of CMPSC 264 and 206.
Technical study of security for Windows Networks. Includes assessing security risks, planning administrative access and user accounts, securing communication channels, securing file and print resources, securing access to remote users and offices, securing network access to Internet users, extending the network to partner organizations, designing a public key infrastructure, and developing a security plan. Hands-on computer assignments required. Field trips may be required. Two maximum completions. Materials fee required. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU

CMPSC 289 — DIRECTORY SERVICES 3 Units
Formerly listed as: "Windows 2000 Directory Services"
Prerequisite: Satisfactory completion of CMPSC 264 and 206.
Technical study of the Directory Services using tools such as LDAP and Active Directory. Includes the design and implementation of directory services, analyzing business requirements, information technology structures, software, hardware and network requirements, large and small scale directory services design, group policy design, design topology and locations, replication and disaster recovery. Hands-on computer assignments required. Field trips may be required. Two maximum completions. Lecture. Laboratory arranged. Materials fee required. (A-F or P/NP) Transfer: CSU

CMPSC 291—WINDOWS PROGRAMMING WITH VISUAL C++ 3 Units
Prerequisite: Satisfactory completion of CMPSC 205, or CAN CSCI 22 course equivalent, or ACM CS-1 course equivalent.
Introduction to the Microsoft Visual C++ programming environment. Review of the C++ language and object-oriented programming concepts. Emphasis on using Visual C++ to build user applications, user interfaces, ActiveX applications, Internet programming, and advanced programming techniques. Hands-on computer programming projects will be required. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC.

CMPSC 294—COMPUTER SCIENCE FINAL PROJECT 3 Units
Recommended for Success: Completion of at least 18 units of required courses leading to the Associate Degree in Computer Science.
Culminating experience for students pursuing an AS degree in Computer Science. Objectives of degree courses will be integrated into a final managed project advised by one or more Computer Science faculty. Effective project and team management will be emphasized. Field trips may be required. (A-F only) One completion allowed. Transfer: CSU

CMPSC 298A,B,C—SPECIAL TOPICS IN COMPUTER SCIENCE 1,2,3 Units
Prerequisite: Varies with topic.
Participation in discussion, analysis, and evaluation of a special topic in computer science, microcomputer applications, and related technologies. Topic to be announced in class schedule. Twelve maximum units in any combination. Field trips may be required. Lecture. Materials fee required. Transfer: CSU

CMPSC: NON-CREDIT COURSES

CMPSC 801—DATABASE MANAGEMENT SYSTEM WORKSHOP
An introduction to a database management system with hands-on instruction using a microcomputer. Students will define, create, and use their own database. Unlimited repeats. Lecture/Laboratory. Materials fee required.

CMPSC 803—SPREADSHEET WORKSHOP
Introduction to the basic application of computers in the business environment. Specific instruction on use of the Electronic Spreadsheet. Unlimited repeats. Lecture/Laboratory. Materials fee required.

CMPSC 805—WORD PROCESSING WORKSHOP
Introduction to the basic application of computers in the business environment. Specific instruction on use of word processing as an office automation tool. Exploration of benefits of word processing and its ability to expand productivity. Unlimited repeats. Lecture/Laboratory. Materials fee required.

COLSK (College Skills)

COLSK 810—COLLEGE SKILLS DEVELOPMENT
Provides supervised computer laboratory experience for students who must use a computer laboratory to achieve the goals and objectives of a course in which they are enrolled. Enrollment takes place when students log-on to computers located in Modesto Junior College laboratories. Unlimited repeats. Laboratory.

COLSK 820—COLLEGE SKILLS ENHANCEMENT
Supervised experience developing and implementing research methods and strategies to enhance classroom learning. Unlimited repeats. Laboratory.

DAIND (Dairy Industry)

DAIND 301—GOOD MANUFACTURING PRACTICES AND SANITATION 1 Unit
Introduction to dairy plant sanitation, good manufacturing practices, guidelines and implementation. Introduction to chemicals, pH and their roles in functional cleaning of the dairy plant and associated equipment. Field trips required. Two completions allowed. Lecture. (A-F Only)

DAIND 302—FLUID STREAM 1 Unit
Introduction to the basic elements of routing and uses of fluid milk throughout the dairy plant. Demonstration of how fluids are utilized. Process flow from incoming raw milk throughout the plant to pasteurized finished products. Field trips required. Two maximum completions. Lecture. (A-F Only)
Dance

For dance course descriptions, please see THETR (Theatre) or PEC (Physical Education: Co-Ed Activities).
ECON 101 — ECONOMIC PRINCIPLES: MACROECONOMICS 3 Units
Prerequisite: Satisfactory completion of MATH 90
Recommended for Success: Before enrolling in this course, students are strongly advised to have college level composition skills.
Introduction to macroeconomic theory in the context of managed market economy. Covers basic concepts in economics, particularly those relating to aggregate economic analysis, such as scarcity, trade-offs, and opportunity costs. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics, and economic growth. Lecture (A-F or P/NP) Transfer: CSU, UC (CC ECON 10) General Education: (MJC-GE-B) (CSU-GE-B2) (IGETC: 4)

ECON 102 — ECONOMIC PRINCIPLES: MICROECONOMICS 3 Units
Recommended for Success: Satisfactory completion of High school algebra or MATH 70.
An introductory course focusing on individual economic decision-making. Topics include scarcity, opportunity costs, comparative advantage, market structure and market failure, elasticity, cost theory, price and output determination under various market structures and factor markets. Related topics such as international trade, public choice, income distribution, externalities and government regulation may be included. Lecture. Transfer: CSU, UC (CC ECON 11) General Education: (MJC-GE-B) (CSU-GE-B2) (IGETC: 4)

ECON 115 — ECONOMIC HISTORY OF THE UNITED STATES 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 Also offered as HIST 115.
Analysis of origins and development of business, labor and agriculture from the colonial period to the present. Emphasis on the federal government’s part in the development and regulation of business, labor and agriculture, the government’s role in the national economic process. Lecture. Transfer: CSU, UC General Education: (MJC-GE-B) (CSU-GE-D2) (B4) (IGETC: 4)

EHS (Environmental Horticultural Science)
In this program the student will develop skills in plant recognition and use, nursery practices, and landscape design sufficient to enter the landscape or nursery business or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

EHS 50 — BEGINNING ORNAMENTAL GARDENING 2 Units
Formerly listed as OH 50.
Preparation for the fundamentals of indoor and outdoor gardening, planting for patios and balconies, gardening in containers and simple landscaping. Designed for anyone interested in gardening, regardless of prior experience or size of garden. A series of 30 television programs supported by coordinating textual material and by additional printed materials that are optional. Field trips may be required.
EHS 51 — ENVIRONMENTAL HORTICULTURE PREPARATION 3 Units
Formerly listed as OH 51 - Ornamental Horticulture Preparation.
A preparatory course in environmental horticulture, emphasis on nursery operation including structures and layout, seeding, transplanting, planting, pruning, watering, fertilization, pest control, plant diseases and abnormalities. Preparation and use of propagating and planting mediums. Use and maintenance of common tools and equipment. Saturday field laboratory may be required. Field trips required. Lecture/Laboratory.

EHS 56 — PREPARATORY PARK AND LANDSCAPE MAINTENANCE 3 Units
Preparation for training in installation of plant materials and materials of parks and other planted areas and in skills required for students to qualify as technicians. Special interest directed to provide specific skills in such areas as forestry, highway maintenance, city, state and federal parks. (A-F or P/NP) Field trips required. Lecture/Laboratory. Materials fee required.

EHS 58 — PREPARATORY FLORAL DESIGN 3 Units
Formerly listed as OH 58.
A preparatory course in commercial floristry teaching basic theory, techniques, and skills currently practiced in the floral design industry. Construction of basic floral products for resale; cut flower processing and industry sales practices. Field trips required. Lecture/Laboratory.

EHS 61 — PREPARATORY ORNAMENTAL PLANT IDENTIFICATION 3 Units
Formerly listed as OH 61.
Preparation in the identification, growth habits, culture and ornamental use of house plants, vines, ground covers, annuals, perennials and small shrubs adapted to climates of California central valleys. One Saturday laboratory required. Field trips required. Lecture/Laboratory.

EHS 62 — PREPARATORY ORNAMENTAL SHRUB AND TREE IDENTIFICATION 3 Units
Formerly listed as OH 62.
Preparation in the identification, growth habits, culture and use of large shrubs and trees adapted to climates of California central valleys. Field laboratories, including some on Saturdays, are required. Field trips required. Lecture/Laboratory.

EHS 65 — INTRODUCTORY LANDSCAPE PLANNING AND DESIGN 3 Units
Formerly listed as OH 65.
Preparation in the planning and designing of landscaped areas. Emphasis on location of lawns, trees, shrubs, walks, driveways, patios, planters and other landscape structures for home and park. Field trips required. Lecture/Laboratory.

EHS 100 — ENVIRONMENTAL GARDENING 3 Units
Formerly listed as OH 100.
Plants used in the landscape, basic landscape design principles and plant propagation techniques. Emphasis on the practical application of horticultural principles. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

EHS 201 — PLANT IDENTIFICATION AND USAGE 1 3 Units
Recommended for Success: Satisfactory completion of EHS 210 and/or PLSC 200.
Formerly listed as EHS 201-Plant Materials and Usage 1.
Identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurserymen & Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) Certification Tests Plant Lists. Covers those plants best observed and studied in the spring of the year. Field trips required. Will require Saturday labs. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

EHS 202 — PLANT IDENTIFICATION AND USAGE 2 3 Units
Recommended for Success: Satisfactory completion of EHS 210 and/or PLSC 200.
Formerly listed as EHS 202-Plant Materials and Usage 2.
Identification, growth habits, culture and ornamental use of landscape and indoor plants adapted to climates of California. Plants emphasized will come from the current California Association of Nurserymen & Garden Centers (CANGC) and California Landscape Contractors Association (CLCA) Certification Tests Plant Lists. Covers those plants best observed and studied in the fall of the year. Field trips required. Will require Saturday labs. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

EHS 210 — INTRODUCTION TO ENVIRONMENTAL HORTICULTURE 3 Units
Formerly listed as OH 210 - Introduction to Ornamental Horticulture.
A general course in environmental horticulture with emphasis on nursery operations, landscaping, turf management, and floral industries. Topics include basic botany, cultural practices, propagation, structures and layout, pest management, planting, container gardening and house plants, floral design, plant identification, turfgrass installation and care, and survey of career opportunities. Field trips required. Saturday labs required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 212 — FLORICULTURE CROP PRODUCTION 3 Units
Recommended for Success: Satisfactory completion of EHS 201 and 202.
Formerly listed as OH 212.
Analysis, description and operation of greenhouses and other structures and facilities as they relate to floriculture. Included are: relationships of light, temperature, moisture, aeration, humidity, and fertility of floricultural crops; identification and investigation of major greenhouse grown crops including foliage plants, flowering potted plants, bedding plants, cut flowers, color and specialty crops; and planning and implementing several cropping plans for floriculture plants and products. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 215 — LANDSCAPE DESIGN 3 Units
Recommended for Success: Satisfactory completion of EHS 201 and 202.
Formerly listed as OH 215 - Landscape Planning and Design.
The study and implementation of the art and science of landscape design, including principles of the design process, drafting, graphics, and presentation methods. Project emphasis is placed upon residential and small commercial sites. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 220 — TURFGRASS MANAGEMENT 3 Units
Maintenance and management of turfgrasses that include sports athletic fields, golf courses, parks, cemeteries, commercial, and residential lawns. Discussion will focus on identification, installation, cultural requirements and maintenance practices. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 235 — PLANT PROPAGATION/PRODUCTION 3 Units
Recommended for Success: Satisfactory completion of PLSC 200 and/or EHS 210. Also offered as PLSC 235.
Plant propagation and production practices with emphasis on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, plant pest and disease control, structures and site layout. Preparation and use of propagating and planting mediums. Use and maintenance of common tools and equipment. Regulations pertaining to plant production. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 250 — LANDSCAPE IRRIGATION 3 Units
Recommended for Success: Satisfactory completion of EHS 210.
Formerly listed as OH 250 - Urban Irrigation Practices.
Prepares students to design, install and maintain a water efficient landscape irrigation system. Topics include water supply, basic hydraulics, component identification and terminology, system layout, pipe sizing, types of heads, valves, controllers. Field trips may be required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 276 — LANDSCAPE MAINTENANCE 3 Units
Recommended for Success: Satisfactory completion of EHS 210.
Formerly listed as OH 276 - Park and Landscape Maintenance.
Enhancing the function and aesthetic value of public and private landscapes by applying appropriate maintenance techniques. Topics include planting, pruning, watering, soil fertility, pest management, weed control, and landscape maintenance business practices. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

Transfer:
CSU, UC
EHS 278—LANDSCAPE CONSTRUCTION AND INSTALLATION 3 Units
Recommended for Success: Satisfactory completion of EHS 210.
Formerly listed as OH 278 - Landscape Engineering.
Fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bidding preparation, also covers local codes and state requirements and prepares students to pass the C-27 Landscaping Contractor's License exam. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

EHS 280—BEGINNING FLORAL DESIGN 3 Units
Formerly listed as OH 280.
Introduction to the fundamentals of theory, techniques and skills currently practiced in the floral industry. Includes applied art principles, cut flower care, handling practices, proper use of floral tools and materials, pricing of floral products and use of current floral business technology. Includes constructing corsages, floral arrangements, foliage plant items, which meet floral industry standards. Field trips required. Two maximum completions. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

EHS 281—ADVANCED FLORAL DESIGN 3 Units
Prerequisite: Satisfactory completion of EHS 280
Formerly listed as OH 281 - Commercial Floristry Advanced Floral Design
Advanced floral design theory, techniques and skills in the floral industry, including wedding, sympathy, party, holiday, high style and advanced floral designs. Techniques include working with the customer, consultations, pricing and use of computers and other business machines. Construction and servicing of weddings, funerals, party and holiday floral displays. Field trips required. Two maximum completions. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

EHS 282—FLORAL SHOP MANAGEMENT 4 Units
Prerequisites: Satisfactory completion of EHS 280 and EHS 281.
Formerly listed as OH 282.
Provides insight into the business and management skills needed to run a successful floral shop. Flower shop involvement required. Field trips required. Two maximum completions. Lecture/Laboratory/Other. (A-F or P/NP) Lecture. Materials fee required. Transfer: CSU

EHS 283—COMMERCIAL FLORISTRY PRACTICUM 4 Units
Prerequisites: Satisfactory completion of EHS 280, 281, 282.
Recommended for Success: Satisfactory completion of EHS 210, 212.
Formerly listed as OH 283.
Involvement in all areas of, and taught in, a retail flower shop. Includes principles of small business management, including personnel, physical plant and financial management, floral design, construction, and pricing, floral orders and wire services; floral delivery; purchasing, marketing and inventory control. Two maximum completions. Laboratory/Other Conjunction with practicing flower shop manager - MJC nursery or shop site. Field trips required. (A-F Only)

EHS 284—COMMERCIAL FLORISTRY INDUSTRY SKILL 1 Unit
Formerly listed as OH 284.
A repeatable short course in Ornamental Horticulture that covers all skill aspects of the wholesale and retail nursery business. Also included are excerpts from plant identification, turf, and landscape design. Six maximum completions. Field trips may be required. Lecture. (A-F Only)

EHS 290—SPECIAL TOPIC IN ENVIRONMENTAL HORTICULTURE 1 Unit
Formerly listed as OH 290.
A special topic in Ornamental Horticulture - MJC nursery or site. Field trips required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU

EHS 291—ENVIRONMENTAL HORTICULTURE 3 Units
SCIENCE TEACHING STRATEGIES
Application of environmental horticulture science teaching strategies. Construction of an action plan incorporating environmental horticulture science curriculum in an applied setting, such as a school garden, Exploration of science curriculum standards as they relate to teaching strategies applied in the classroom. May be completed up to two times. Field trips required. (A-F or P/NP) Lecture. Transfer: CSU

EHS 292—LANDSCAPE CONSTRUCTION AND INSTALLATION 3 Units
SCIENCE TEACHING STRATEGIES
Recommended for Success: Successful completion of EHS 291.
Fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bidding preparation, also covers local codes and state requirements and prepares students to pass the C-27 Landscaping Contractor's License exam. Field trips required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

EHS 293—LANDSCAPE CONSTRUCTION AND INSTALLATION 3 Units
Formerly listed as OH 293.
Fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bidding preparation, also covers local codes and state requirements and prepares students to pass the C-27 Landscaping Contractor's License exam. Field trips required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

EHS 294—LANDSCAPE CONSTRUCTION AND INSTALLATION 3 Units
Formerly listed as OH 294.
Fundamentals of landscape construction, including soil preparation, paving and construction materials, hand and power tool use, turf and plant installation, plan reading, estimating and bidding preparation, also covers local codes and state requirements and prepares students to pass the C-27 Landscaping Contractor's License exam. Field trips required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

ELTEC (Electronics Technology)

ELTEC 205—ELECTRONICS FABRICATION AND ASSEMBLY TECHNIQUES 3 Units
Introduction to current fabrication and assembly techniques used in the electronics industry. Manual and automated techniques used in component manufacturing, circuit assembly, and system integration. Materials fee required. Lecture/Laboratory. Transfer: CSU

ELTEC 208—THE WORLD OF ELECTRICITY AND ELECTRONICS 3 Units
Recommended for Success: Satisfactory completion of MATH 20
Also offered as INTEC 208.
An overview of electrical and electronic phenomena as applied to common consumer and industrial devices. The course examines the physical nature of electricity and magnetism and the application of the scientific method. The historical development and the socioeconomic aspects of the “electronic age” are examined. Lecture/Laboratory. Materials fee required. Transfer: CSU General Education: (MJC-GE: A)

ELTEC 212—DIGITAL PRINCIPLES AND CIRCUITS 3 Units
Prerequisite: Satisfactory completion of MATH 70 or concurrent enrollment.
Also offered as CMPET 212.
Introduction to digital circuits. Use and application of digital components in electronic devices and computers. Interfacing input and output devices to digital circuits. Introduction to programmable logic devices. Materials fee required. Lecture/Laboratory. Transfer: CSU General Education: (MJC-GE: A)

ELTEC 214—MICROPROCESSOR PROGRAMMING AND INTERFACING 4 Units
Prerequisite: Satisfactory completion of ELTEC 212 or CMPET 212
Also offered as CMPET 214.
Introduction to the structure and operation of microprocessors as controllers for today’s electronic devices and systems. Basic microprocessor hardware including memories, registers, counters, input/output ports, decoders, and arithmetic logic using the popular PIC RISC microcontroller. Machine language simulation and development on personal computers. Emphasis on interfacing to electronic hardware. Materials fee required. Lecture/Laboratory. (A-F Only) Transfer: CSU
ELTEC 221—INSTRUMENTATION DEVICES AND SYSTEMS 3 Units
Prerequisite: Satisfactory completion of ELTEC 208.
Also offered as INTEC 221.
An introduction to industrial instrumentation devices and systems. The principles and operation of mechanical and electrical transducers. Analysis of industrial instrumentation systems. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

ELTEC 223—INDUSTRIAL ELECTRICAL COMPONENTS AND CONTROL DEVICES 3 Units
Also offered as INTEC 223.
An introduction to common components and control devices found in the manufacturing and processing industry. Content includes basic terminology, component identification, manufacturer’s specifications, and maintenance procedures for the components and devices. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

ELTEC 226—MOTORS, CONTROLS AND CONTROLLERS 3 Units
Prerequisite: Satisfactory completion of ELTEC/INTEC 208.
Also offered as INTEC 226.
Introduction to AC and DC motors and control systems. Emphasis on system troubleshooting. Use and programming of AC and DC systems. Lecture/Laboratory. (A-F Only) One completion allowed.
Transfer: CSU

ELTEC 229—COMMERCIAL AND INDUSTRIAL WIRING 3 Units
Also offered as INTEC 229.
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete (INTEC 225 OR AGM 225) and (INTEC 208 OR ELTEC 208).
Essential insights and practices in Commercial and Industrial Wiring that develop skills for the electrical trade. Topics include the application of basic concepts in the design of electrical systems, implementation of accepted trade practices used in installations, and common troubleshooting techniques. Field trips may be required. Materials fee required. (A-F Only) Transfer: CSU

ELTEC 230—BLUEPRINT READING 1 Unit
Also offered as INTEC 230.
Recommended for success: Before enrolling in this course, students are strongly advised to satisfactorily complete AGM 225 and (ELTEC/INTEC 229) and (ELTEC/INTEC 226).
Fundamental concepts of blueprint reading for electricians applicable in any field. Topics include: construction-related blueprints (residential, commercial and industrial), machinery, automation, electronics, associated systems (hydraulic, pneumatic, communication, etc.). Lecture/Laboratory. (A-F Only) Transfer: CSU

ELTEC 232—INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS 2 Units
Also offered as CMPET 232.
Introduction to the basic concepts of programmable logic controllers. Installation, programming, maintaining, and troubleshooting of microsized programmable logic controller systems. Lecture/Laboratory. Transfer: CSU

ELTEC 234—ADVANCED TOPICS IN PROGRAMMABLE LOGIC CONTROLLERS 2 Units
Recommended for success: Satisfactory completion of ELTEC 232 or CMPET 232 or equivalent course.
Also offered as CMPET 234.
Advanced study of programmable logic controllers and complete controller systems. Emphasis on component selection, design, and operation of industry-like controller systems. Lecture/Laboratory. Transfer: CSU

ELTEC 265—TROUBLESHOOTING TECHNIQUES 1 Unit
Also offered as INTEC 265.
Common troubleshooting methodologies used in manufacturing today. One-solution and multiple-solution problems commonly found in everyday life through industrial processes. Prepares students to actively solve problems in personal and professional life. Lecture. Transfer: CSU

ELTEC 320—ELECTRICAL SAFETY 1 Unit
Also offered as INTEC 320.
Understanding of electrical hazards common to business and industry. Introduction to the knowledge of common electrical injuries to employees, property damage, and how to prevent them. Basic skill development in how to recognize, evaluate, and control electrical hazards. The course covers regulatory compliance and safe work practices. (A-F) Approved for online and hybrid instruction.

EMS (Emergency Medical Service)

EMS 350—FIRST RESPONDER WITH HEALTH CARE PROVIDER CPR 3 Units
An entry-level course designed for firefighters and other emergency workers who will respond to medical emergencies ahead of ambulance transportation. Focuses on stabilization of ill or injured patients prior to arrival of more advanced life support. This course meets the basic requirements for most volunteer fire agencies as well as some paid fire departments. Unlimited completions. Lecture/Laboratory.

EMS 380—BASIC ECG INTERPRETATION AND INTRODUCTION TO CARDIAC CARE 3 Units
Recommended for success: Understand basic medical terminology. Designed for students who have had little or no formal training in arrhythmia diagnosis. Emphasis will be on diagnosing the major and life-threatening arrhythmias incorporating patient assessment and treatment. Field trips may be required. One completion allowed. Lecture (A-F or P/NP) Transfer: (CC EMS 20)

EMS 389—EMERGENCY MEDICAL TECHNICIAN 1 LAB½ Unit
Prerequisite: Satisfactory completion of EMS 350; Valid CPR card
Concurrent enrollment in: EMS 390
Preparation in a laboratory setting for certification as an Emergency Medical Technician 1. Training in basic life support emergency care as mandated by the California Emergency Medical Services Authority. (A-F only). Multiple completions allowed.

EMS 390—EMERGENCY MEDICAL TECHNICIAN 1 6 Units
Formerly listed as EMT 390
Prerequisite: Satisfactory completion of EMS 350; Valid CPR card
Prepares students for certification as an Emergency Medical Technician 1. Classroom instruction involves laboratory and clinical experience. Trained to provide emergency care (basic life support level) as an emergency medical service responder (police, fire, ambulance, ranger, rescue squad or industrial emergency operations). Lecture/Laboratory. Materials fee required (for infection control training). (A-F Only)

EMS 391—EMERGENCY MEDICAL TECHNICIAN 1 REFRESHER COURSE 1½ Units
Prerequisite: Satisfactory completion of EMT 390 with a grade of “C” or better or equivalent.
Provides new and updated information for the Emergency Medical Technician, as well as reinforcement of basic knowledge and skills. Meets requirements for re-certification as an EMT in California. Unlimited completions. Lecture. (A-F Only)
### ENGL (English)

#### PLACEMENT REQUIREMENTS FOR ENGLISH COURSES

For students who have not already completed an English composition course at Modesto Junior College or at any other college, placement in ENGL 49, 50, and 101 requires the English Placement Examination.

| ENGL 50: | Placement by examination or completion of ENGL 49 with a grade of C or better. |
| ENGL 101: | Placement by examination or completion of ENGL 50 with a grade of C or better. |
| ENGL 102: | Completion of ENGL 101 with a grade of C or better. |
| ENGL 103: | Completion of ENGL 101 with a grade of C or better. |

#### ENGL 25—COMPUTER-ASSISTED ESL WRITER’S WORKSHOP 1 Unit

Non-degree course.

Recommended for Success: Satisfactory completion of ESL 45 and/or enrollment in ESL 46, 47, 48, 70.

Formerly listed as ENGL 25A.

Independent study for any upper level ESL student who needs supplemental instruction in vocabulary, grammar, writing techniques, and proofreading. Students may enroll any time during the semester. Two maximum completions. Laboratory.

#### ENGL 26—COMPUTER-ASSISTED WRITER’S WORKSHOP 1 Unit

Non-degree course.

Recommended for Success: Satisfactory completion of ESL courses and/or enrollment in ENGL 49, 50 or 101.

Formerly listed as ENGL 25B.

Independent study for any student who needs supplemental instruction in focus, organization, development, voice, audience, and MLA convention, from sentence level to essay length prose. Student may enroll any time during semester. Two maximum completions. Laboratory.

#### ENGL 44—FUNDAMENTALS OF GRAMMAR 1 Unit

Non-degree course.

A computer-based and workshop-based course for students who want to review English. Offered in the Center for Learning Assistance. Orientation required. Recommended for students who need preparation to succeed in English 49. Open-entry/Open-exit. (P/NP Only)

#### ENGL 46—COMPUTER-ASSISTED FUNDAMENTALS OF WRITING 1 Unit

Non-degree course.

Recommended for Success: Concurrent enrollment in ENGL 44 and READ 45.

A computer-based course in the fundamentals of writing, focusing on basic written expression. Students must complete self-paced modules on selected topics. Students must log in for a minimum of three hours each week at the Center for Learning Assistance, complete the required writing exercises and computer-based modules, and meet with the Center for Learning Assistance instructor and tutors at specified times to receive credit for the course. Recommended for students whose English placement scores fall below entrance into ENGL 50. Open entry/open exit. (P/NP Only).

#### ENGL 48—GRAMMAR REVIEW 1 Unit

Non-degree course.

Students will review the fundamentals of standard English grammar. They will practice recognizing and correcting errors in grammar and usage. (A-F or P/NP).

#### ENGL 49—BASIC ENGLISH SKILLS 5 Units

Non-degree course.

Corequisite: Satisfactory completion of or concurrent enrollment in READ 40.

Fundamentals of writing. Emphasis on improving writing fluency, developing sentence structure, and learning to edit for spelling, punctuation and usage. Credit in this course may not be used to satisfy English requirements for Associate Degree from Modesto Junior College. (P/NP Only) Lecture. (CC ENGL. 250)

#### ENGL 50—BASIC COMPOSITION AND READING 5 Units

Prerequisite: Satisfactory completion of ENGL 49 or qualification by the MJC Assessment Process

This course is designed for students who need to build basic English skills in writing, reading, and thinking. The course includes instruction in writing effective sentences, organizing ideas into paragraphs and essays, utilizing fundamentals of English syntax, reading academic texts, and building vocabulary. Basic critical thinking and study skills are also emphasized. Field trips may be required. One completion allowed. Applicable to the associate degree. Lecture. (A-F or P/NP) Transfers (CC ENGL. 151)

#### ENGL 90—WRITING THE RESEARCH PAPER 1 Unit

Prerequisite: Eligibility for English 101 or concurrent enrollment in English 50.

Practice in the fundamentals of research and the writing of the research paper in both MLA and APA formats. Lecture.

#### ENGL 101—COMPOSITION AND READING 3 Units

Prerequisite: Satisfactory completion of ENGL 50 or qualification by the MJC English assessment process.

Recommended for success: Satisfactory completion of READ 184.

Fundamental skills in reading and writing at the college level. Emphasis on exposition, argument, research, and information competency. Students are required to write a minimum of 8,000 words, at least 6,000 of which must be in essays that have a developed thesis. 2,000 - 3,000 words of the 8,000 must be research-based writing. MLA conventions of formatting and documentation. Field trips may be required. Lecture. (A-F or P/NP) Transfers (CSU, UC (CC ENGL 1A) General Education: (MUC-GE: D1) (CSU-GE: A2) (IGETC: 1A)

#### ENGL 102—ADVANCED COMPOSITION AND INTRODUCTION TO LITERATURE 3 Units

Prerequisite: Satisfactory completion of ENGL 101.

Intended primarily for university transfer students, but open to any qualified student. Advanced composition with an introduction to methods used in the analysis of literary texts. Field trips may be required. Lecture. Transfer: CSU, UC (CC ENGL 1B) General Education: (MUC-GE: C) (CSU-GE: C2) (IGETC:3B)

#### ENGL 103—ADVANCED COMPOSITION & CRITICAL THINKING 3 Units

Prerequisite: Satisfactory completion of ENGL 101.

Advanced composition course that focuses on the techniques and principles of argumentative writing. Examines style, diction, inference, evidence, reasoning, and rhetorical strategies of written argument. Students are required to write a minimum of 8,000 words, at least 6,000 of which must be in essays that have a developed thesis. Field trips may be required. Lecture. Transfer: CSU, UC (CC ENGL 1C) General Education: (MUC-GE: D2) (CSU-GE: A3) (IGETC: 1B)

#### ENGL 105—CREATIVE WRITING: POETRY 3 Units

Prerequisite: Satisfactory completion of ENGL 101.

Instruction and practice in writing poetry. Two maximum completions. Lecture. (MJC Activities) Transfer: CSU, UC General Education: (CSU-GE: C2)

#### ENGL 106—CREATIVE WRITING: SHORT FICTION 3 Units

Prerequisite: Satisfactory completion of ENGL 101.

Instruction and practice in writing shorter forms of fiction. Two maximum completions. Lecture. (MJC Activities) Transfer: CSU, UC General Education: (CSU-GE: C2)
ENGL 108 — CREATIVE WRITING: AUTOBIOGRAPHY 3 Units
Prerequisite: Satisfactory completion of ENGL 101. Instruction and practice in the writing of an autobiography. Two maximum completions. Lecture. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

ENGL 109 — CREATIVE WRITING: SCRIPTWRITING 3 Units
Formerly listed as "Scriptwriting: Dramatic Writing for Film, Television, and Theater" Prerequisite: Satisfactory completion of ENGL 101. Instruction and practice in the writing of dramatic scripts for film, television, and theater. Field trips may be required. Two maximum completions. Lecture. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

ENGL 112 — INTRODUCTION TO THE NOVEL AND SHORT STORY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. Prerequisite: ENGL 101 eligibility. Introduction to the novel and short story with emphasis on intelligent reading, analysis and discussion of a range of fiction representing various types and traditions. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 114 — INTRODUCTION TO POETRY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 Prerequisite: ENGL 101 eligibility. Analysis and discussion of poetry. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 116 — INTRODUCTION TO DRAMA 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 Prerequisite: ENGL 101 eligibility. Analysis and discussion of selected plays from classical Greek period to present. Field trips may be required. One completion allowed. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 131 — INTRODUCTION TO WORLD LITERATURE TO 1500 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 Prerequisite: ENGL 101 eligibility. Classical and medieval literature including historical backgrounds and reading in Asian, Middle Eastern, and European cultures. Lecture. One completion allowed. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 132 — INTRODUCTION TO WORLD LITERATURE FROM 1500 TO PRESENT 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 Prerequisite: ENGL 101 eligibility. (ENGL 131 is not a prerequisite.) ENGL 132 is a continuation of ENGL 131, reading from the Renaissance to contemporary literature of Asian, Middle Eastern, European, and Latin American cultures. Lecture. One completion allowed. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 135 — AMERICAN LITERATURE: TO 1850 3 Units
Prerequisite: ENGL 101 eligibility. Survey of American literature from its beginning to mid-nineteenth century. Lecture. Field trips may be required. One completion allowed. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 136 — AMERICAN LITERATURE: 1850 TO THE PRESENT 3 Units
Prerequisite: ENGL 101 eligibility. ENGL 135 is not a prerequisite. Survey of American literature from mid-nineteenth century to the present. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 137 — SURVEY OF ENGLISH LITERATURE TO THE 18TH CENTURY 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102. Prerequisite: Satisfactory completion of ENGL 50 or placement in ENGL 101 by MJC Assessment Process. Survey of English literary history from the Anglo-Saxons to the 18th century with detailed study of the writings of Chaucer, Marlowe, Spenser, Shakespeare, Milton, and others. (A-F or P/NP) Lecture. Field trips may be required. Transfer: CSU, UC (CC ENGL 47) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 138 — SURVEY OF ENGLISH LITERATURE: 18TH CENTURY - PRESENT 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102. Prerequisite: Satisfactory completion of (ENGL 50) or placement in ENGL 101 by MJC Assessment Process. Survey of English literary history from the 18th century to the present with detailed study of the writings of Pope, Wordsworth, Coleridge, Keats, Shelley, Tennyson, Woolf, and others. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 139 — THE BIBLE AS LITERATURE: THE HEBREW CANON AND INTERTESTAMENTAL WRITINGS 3 Units
Recommended for success: Eligibility for ENGL 101. Literary criticism and an appreciation of historical background and textual transmission of selected books of the Hebrew Bible (Old Testament) and Intertestamental Writings (also known as the Apocrypha) in translation. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 147 — THE BIBLE AS LITERATURE: THE NEW TESTAMENT 3 Units
Recommended for Success: Eligibility for ENGL 101. Literary criticism and an appreciation of historical background and textual transmission of selected books of the New Testament. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 155 — FILM APPRECIATION 3 Units
An introductory course in film appreciation, emphasizing the development of sensitivity and critical judgment in audience response to film. Field trips may be required. Lecture/Viewing. Transfer: CSU, UC (CC ENGL 11) General Education: (MJC-GE: C) (CSU-GE: C1,C2) (IGETC: 3B)

ENGL 156 — HISTORY OF CINEMA 3 Units
Examines the international development of cinema from 1895 to the present. Covers a wide range of both American and foreign films and offers a broad survey of major movements, styles, and genres in the history of motion pictures. Focuses specifically on the social, historical, technical, and technological factors that have shaped the film industry and the films produced by it. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC. General Education: (MJC-GE: C) (CSU-GE: C1,C2) (IGETC: 3B)

ENGL 157 — INTRODUCTION TO FOLKLORE 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to have satisfactorily completed ENGL 50 or to have been placed in ENGL 101 by the MJC Assessment Process. Study of folkgroups and their mentsifacts, sociofacts, and artifacts. Introduction to folklorics. Methodology, folk themes, and literary symbolism. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 158 — INTRODUCTION TO DRAMA 3 Units
Recommended for Success: Eligibility for ENGL 101. Literary criticism and an appreciation of historical background and textual transmission of selected books of the New Testament. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 159 — INTRODUCTION TO DRAMA 3 Units
Recommended for Success: Eligibility for ENGL 101. Literary criticism and an appreciation of historical background and textual transmission of selected books of the New Testament. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)
ENGL 168—ADOLESCENT LITERATURE 3 Units
Prerequisite: ENGL 101 eligibility. Recommended for Success: Satisfactory completion of ENGL 101. Introduction to literature for adolescents (ages 9–16). Includes types of literature, and forms drawn from a variety of ethnic and cultural sources, ways to promote interest, themes, and criteria for choosing materials. Field trips may be required. Lecture. One completion allowed. (A-F or P/NP)
Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 169—CHILDREN’S LITERATURE 3 Units
Prerequisite: ENGL 101 eligibility. Recommended for Success: Satisfactory completion of ENGL 101. Introduction to literature for children. Includes types of literature and forms drawn from a variety of ethnic and cultural sources, storytelling, ways to promote interest, and criteria for choosing materials. Lecture. One completion allowed. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

ENGL 171—INTRODUCTION TO AFRICAN-AMERICAN LITERATURE 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. An introduction to the contributions of black Americans in American literature from the slave era through the present. The emphasis will be upon a chronological study of major works including the following: slave narratives, folk tales, poetry, short story, novel and drama. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 172—INTRODUCTION TO CHICANO LITERATURE 3 Units
Recommended for Success: Satisfactory completion of English 101. Survey of Chicano literature in English from its beginnings to its contemporary form. Emphasis on influences that have shaped the literature and critical skills needed to evaluate and appreciate Chicano poetry, theater, fiction, and essay. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 173—INTRODUCTION TO LATIN AMERICAN LITERATURE 3 Units
Prerequisite: ENGL 101 eligibility. Recommended for Success: Satisfactory completion of English 101. An introduction to Latin American literature from its Colonial Period to the present. Emphasis on chronological survey of major works of Latin American writers studied in English translation and selected from the following: indigenous legends, chronicles, epistles, poetry, novel, drama, and short story. Field trips may be required. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP). Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 174—INTRODUCTION TO MODERN ASIAN LITERATURE 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. An introductory course on Asian literature from the 19th century to the present in its English translation. Emphasis on major works that have made an impact on western literary tradition and the social, cultural, and historical forces that have shaped these works. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 175—INTRODUCTION TO WOMEN’S LITERATURE 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. An introduction to literature by and about women, including an historical overview, archetypes, stereotypes, cultural impediments to women’s writing, methods of criticism, and recent literary achievements. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 176—INTRODUCTION TO MEXICAN LITERATURE 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. Introduction to Mexican literature from its Colonial Period to the present. Emphasis on chronological survey of major works of Mexican writers studied in English translation and selected from the following: chronicles, epistles, poetry, novel, drama, and short story. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 178—MASS MEDIA AND THE PUBLIC 3 Units
A non-technical course for the consumer of the mass media dealing with the way information is gathered and processed by the mass media, and the history of the mass media in the United States, theories of its role in society, and current problems and criticisms. Field trips may be required. Lecture. Transfer: CSU, UC (CSU-GE:D7) (IGETC:4)

ENGL 179—INTRODUCTION TO NATIVE AMERICAN LITERATURE, MYTHOLOGY, AND THE ORAL TRADITION 3 Units
Recommended for Success: Satisfactory completion of ENGL 101. Study of traditional and contemporary Native American literature from a variety of nations, including some local Native American peoples. Traditional chronicle, oral tale, and myth. Relationship of contemporary writing to earlier cultural heritage. Place of Native American literature in the American literary tradition and canon. Close reading of contemporary autobiography, novels, short fiction, and poetry. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B).

ENGL 183—INTRODUCTION TO TUTORING COMPOSITION 2 Units
Prerequisite: Satisfactory completion of ENGL 101. Introductory course in the tutoring process of English composition. Students will learn strategies for tutoring developmental to advanced writers. Specific focus will be on techniques for improvement of fluency, structure, revision, proofreading, and reading. Intended for students selected as tutors for the Division of Literature and Language Arts’ learning centers. Lecture. (A-F Only). Transfer: CSU.

ENGL 184—ADVANCED TUTORING OF COMPOSITION 2 Units
Prerequisite: Satisfactory completion of ENGL 183. Course in the advanced techniques of tutoring processes of English composition. Students will further develop strategies for tutoring developmental to advanced writers. Specific focus will be on advanced techniques for improvement of fluency, structure, revision, proofreading, and reading and on the study of timely issues affecting tutors and students. Intended for students selected as tutors for the Division of Literature and Language Arts’ learning centers. Field trips may be required. Lecture. (A-F Only). Transfer: CSU.

ENGR (Engineering)

ENGR 100—INTRODUCTION TO ENGINEERING AND ARCHITECTURE 1 Unit
Also offered as ARCH 100. Introduction to the vocational and academic opportunities at MJC with special emphasis on engineering, architecture and related technologies. Topics include models of student success, characteristics of the professions, development of educational plans, associate degree requirements, importance of teamwork, and self assessment. Activities include field trips, practice labs, and presentations by MJC counselors and practicing engineers and architects. Lecture. Materials fee may be required. (Fall) MJC Guidance Transfer: CSU, UC
ENGR 101—INTRODUCTION TO SURVEYING AND TOPOGRAPHY
Prerequisite: Satisfactory completion of MATH 115 or MATH 122.
Introduction to principles and techniques for measurement of distances, directions, and angles. Additional topics include measurement errors, traverse computations, global positioning systems, Total Station, topographic surveys, and building and curve layout. Lecture/Laboratory. Field trips may be required. Transfer: CSU, UC

ENGR 220—BASIC ENGINEERING GRAPHICS 1
Prerequisites: Satisfactory completion of MATH 90 or eligibility for MATH 101 or higher as determined by MJC Assessment process.
Development of graphics skills for engineering drawings with the use of computer-aided-drafting (CAD) software. Topics include orthographic and pictorial projections, section and auxiliary views, dimensioning, tolerancing, threaded fasteners, and working drawings. Introduction to 3D modeling and engineering design. Design project required. (A-F or P/NP) Lecture/Laboratory. Materials fee may be required. Transfer: CSU, UC

ENGR 221—BASIC ENGINEERING GRAPHICS 2
Prerequisite: Satisfactory completion of ENGR 220
Continuation of ENGR 220 to include dimensioning, tolerancing, threaded fasteners, and working drawings. Introduction to 3D modeling and engineering design. Design project required. ENGR 220 and ENGR 221 are the two-semester equivalent of ENGR 121 (now inactive). (A-F or P/NP) Lecture/Laboratory. Transfer: CSU, UC

ENGR 227—ENGINEERING GRAPHICS
Prerequisite: Satisfactory completion of MATH 90 or eligibility for MATH 101 or higher as determined by MJC Assessment process.
Development of graphics skills for engineering drawings with the use of computer-aided-drafting (CAD) software. Topics include orthographic and pictorial projections, section and auxiliary views, dimensioning, tolerancing, threaded fasteners, and working drawings. Introduction to 3D modeling and engineering design. Design project required. (A-F or P/NP) Lecture/Laboratory. Materials fee may be required. Transfer: CSU, UC

ENGR 228—ADVANCED ENGINEERING GRAPHICS
Prerequisite: Satisfactory completion of ENGR 220 or concurrent enrollment.
Advanced topics in computer-assisted drafting including solids modeling, file management, and system management. Three maximum completions. Field trips may be required. Lecture/Laboratory. Materials fee may be required. Transfer: CSU, UC

ENGR 230—FIELD SURVEYING
Recommended for success: Satisfactory completion of Math 70 or AG 280. Also offered as AGM 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 231—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 233—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 235—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 237—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 239—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 240—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 242—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 244—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 246—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU

ENGR 248—FIELD SURVEYING
Prerequisite: Satisfactory completion of ENGR 230.
Selection, care and checking of tapes, levels, GPS and laser systems. Introduction to total station care and use. Field observations, note taking and office computations; use of surveying instruments and equipment for land measurement and mapping; practice in differential, profile, and contour leveling; horizontal angles, traverses, and construction problems used in public lands surveying, legal descriptions, and county records. Lecture/Laboratory. (A-F Only) Field trips required. Transfer: CSU
ENGTC 255—STATICS AND STRENGTH OF MATERIALS 3 Units
Recommended for Success: Satisfactory completion of MATH 122 or placement by MJC assessment process.
Study of force and moment systems. Concept of equilibrium stresses, and deformation. Effects of forces and moments acting on beams, structures, and shafts. Field trips may be required. Lecture. Material fees may be required. Transfer: CSU

ENGTC 375—CONSTRUCTION BLUEPRINT READING 2 Units
Reading and interpreting basic two-dimensional blueprints, sketching. Terminology symbols, notes and building code practices for building trades. Field trips may be required. Lecture/Laboratory. Not offered every semester.

ENGTC 376—MECHANICAL BLUEPRINT READING 2 Units
Reading and interpreting basic two-dimensional mechanical drawings; sketching. Terminology symbols, notes, and practices for manufacturing and fabrication trades. Field trips may be required. Lecture/Laboratory. Not offered every semester.

ENSCI (Environmental Sciences)

ENSCI 108—ENVIRONMENTAL CONSERVATION 3 Units
Study of the world's environment to sustain the highest quality of life. Includes study of ecology, populations, environmental pollution, conservation of natural resources including: energy, water, soils, forests, rangelands, and wildlife. Field trips required. Lecture. Transfer: CSU, UC General Education: (ICGE: A) (CSU-GE: B2) (IGETC: 5B)

ENSCI 108L—ENVIRONMENTAL CONSERVATION LABORATORY 1 Unit
Prerequisite: Satisfactory completion of ENSCI 108 or concurrent enrollment in ENSCI 108. Study of environmental conservation management concepts in an experiential format. Laboratory study will encompass environmental pollution controls, population studies; energy use and alternatives; water quality use and conservation; soil analysis and land-use planning; wildlife habitat restoration; and hazardous materials analysis and alternatives. Field trips required. Laboratory. Transfer: CSU, UC

ENSCI 109—INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS 3 Units
Also offered as GEOG 109. Introduction to Geographical Information Systems (GIS). GIS centers upon mapping as a tool for identifying and assessing spatial relationships of human activity. Applications to business, economics, weather, geology, agriculture etc. Students will create, apply, and evaluate databases which generate maps. Field trips required. Lecture/Laboratory. (A-F Only). Transfer: CSU, UC

ENSCI 110—CALIFORNIA WATER 3 Units
An interdisciplinary examination of California's water use and management with an historical emphasis on the politics and conflicts arising from water scarcity. Field trips may be required. Lecture/Laboratory. Materials fee may be required. (A-F Only). Transfer: CSU, UC General Education: (ICGE: B) (CSU-GE: D7) (IGETC: 4)

ESL (English as a Second Language)

The Literature and Language Arts division offers two programs in ESL: a non-credit, adult basic education program of courses on four levels, and a six-level credit program intended for students who plan to pursue other academic and vocational study at the college. Most ESL courses are not degree-applicable; no major is offered.

ESL 10—ENGLISH LANGUAGE 1 10 Units
Non-degree course.
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete ESL 901 and/or ESL 902, especially if they lack elementary listening comprehension and speaking skills. To be successful in ESL 10, students need to be able to understand, follow, and respond to basic instruction(s) in English.
Elementary course in speaking, listening, reading, and writing for persons learning English as another language. Field trips may be required. Lecture. (A-F or P/NP)
ESL 20—ENGLISH LANGUAGE 2 5 Units
Non-degree course.
Prerequisite: Placement in ESL 20 through assessment process or satisfactory completion of ESL 10 or equivalent course.
Continuation of ESL 10. Elementary English for persons learning English as another language. Emphasis on vocabulary and sentence structure for practical communication in school, community and work. Field trips may be required. Lecture.

ESL 23—SPOKEN ENGLISH 1 5 Units
Recommended for Success: Placement in ESL 20 or above.
Concurrent enrollment in ESL 20 or 30 recommended.
Non-degree course.
Elementary speaking improvement for students of English as a second language. Field trips may be required. Two maximum completions. Lecture.

ESL 24—ESL COMPOSITION AND READING 1 5 Units
Prerequisite: Placement in ESL 20 through assessment process or satisfactory completion of ESL 10 or equivalent course.
Concurrent enrollment in ESL 20 recommended.
Non-degree course.
Practice in reading and writing for students at the beginning (second semester) level. Significant homework may be assigned to a lab. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL 30—ENGLISH LANGUAGE 3 5 Units
Prerequisite: Placement in ESL 30 through MJC assessment process, or satisfactory completion of ESL 20 or equivalent course.
Non-degree course.
Continuation of ESL 20. Lower intermediate component for persons learning English as another language. Emphasis on review and expansion of lower intermediate grammatical structures in reading, writing, listening, and speaking. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL 34—ESL COMPOSITION AND READING 2 5 Units
Prerequisite: Placement in ESL 30 through assessment process or satisfactory completion of ESL 20 or equivalent course.
Concurrent enrollment in ESL 30 recommended.
Non-degree course.
Practice in reading and writing for students at the high beginning (third semester) level of ESL courses. Continuation of ESL 24. Significant homework may be assigned to a lab. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL 40—ENGLISH LANGUAGE 4 5 Units
Prerequisite: Placement in ESL 40 through assessment process or satisfactory completion of ESL 30 or equivalent course.
Non-degree course.

ESL 40A—SKILLS FOR SUCCESS IN INTERMEDIATE GRAMMAR ½ Unit
Prerequisite: Placement in ESL 30 or higher through assessment process
Non-degree course.
Designed to provide further practice on grammar points needed for success in ESL 40 or higher; in particular, for students who are weak in prerequisite skills and/or who have failed ESL 40. These courses do not serve as prerequisites for ESL 45. Laboratory

ESL 43—SPOKEN ENGLISH 2 5 Units
Recommended for Success: Placement in ESL 40 or above.
Concurrent enrollment in ESL 40 or 45 recommended.
Non-degree course.
Speaking improvement for students of English as a second language. Field trips may be required. Two maximum completions. Lecture.

ESL 44—ESL COMPOSITION AND READING 3 5 Units
Prerequisite: Placement in ESL 40 through assessment process or satisfactory completion of ESL 30 and ESL 34 or equivalent course.
Concurrent enrollment in ESL 40 recommended.
Non-degree course.
Practice in writing multi-paragraph compositions and reading for students at the intermediate level of ESL. Practice in writing multi-paragraph compositions and reading for students at the intermediate level of ESL with a comprehensive foundation in English grammar and the ability to write well-formed paragraphs in English. Significant homework may be assigned to a lab. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL 45—ENGLISH LANGUAGE 5 5 Units
Prerequisite: Placement in ESL 45 through assessment process or satisfactory completion of ESL 40 or equivalent course.
Non-degree course.
Continuation of ESL 40. Higher intermediate components for persons learning English as another language. Review and expansion of higher intermediate grammatical structures in reading, writing, listening, and speaking. Lecture. (A-F or P/NP)

ESL 46—ESL COMPOSITION AND READING 4 5 Units
Prerequisite: Placement in ESL 45 through assessment process or satisfactory completion of ESL 40 and ESL 44 or equivalent course.
Concurrent enrollment in ESL 45 recommended.
Non-degree course.
Practice in writing academic essays and analysis of authentic reading for students at the higher intermediate level of ESL. Significant homework may be assigned to a lab. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL 47—ENGLISH LANGUAGE 6 5 Units
Prerequisite: Placement in ESL 47 through assessment process or satisfactory completion of ESL 45 or equivalent course.
Non-degree course.
Continuation of ESL 45. Advanced English grammar component for persons learning English as another language. Emphasis on review and expansion of advanced grammatical structures in reading, writing, listening, and speaking for success in college-level courses. Lecture. (A-F or P/NP)

ESL 48—ESL COMPOSITION AND READING 5 5 Units
Prerequisite: Placement in ESL 47 through assessment process or satisfactory completion of ESL 45 and ESL 46 or equivalent course.
Concurrent enrollment in ESL 47 recommended.
Non-degree course.
Practice in composition and reading for advanced ESL students who plan to continue in college. Preparation for reading and writing in various academic and vocational disciplines. Emphasis on writing in response to reading. Significant homework may be assigned to a lab. Lecture. One completion allowed. Field trips may be required. (A-F or P/NP).

ESL: NON-CREDIT COURSES

ESL 901—ESL: BEGINNING
Beginning English for non-English speakers. Emphasis on beginning spoken English and basic literacy. Field trips may be required. Non-graded.

ESL 902—ESL: LOWER ELEMENTARY
Elementary English with emphasis on spoken English for practical needs and preparation for advancement into credit ESL classes. Non-graded. Field trips may be required.

ESL 903—ESL: HIGHER ELEMENTARY
Elementary level English for speakers of other languages. Instruction and practice in listening, speaking, and practical reading and writing. Preparation for advancement into credit ESL classes. Non-graded. Field trips may be required.
ESL 904 — ESL: INTERMEDIATE
Intermediate level English for speakers of other languages. Instruction and practice in listening, speaking, reading and writing with a greater emphasis on academic preparation. Field trips may be required. Non-graded.

ESL 920 — ENGLISH AT WORK 1
Formerly listed as ESL 906
High beginning to lower intermediate level of English for speakers of other languages. English language skills needed to seek employment and function successfully in the workplace. Field trips may be required. Unlimited completions. Field trips may be required. Non-graded.

ESL 921 — ENGLISH AT WORK 2
Formerly listed as ESL 906
Recommended for Success: Placement by assessment process at ESL Level 3 or 4 (ESL 50 or ESL 40). Continuation of ESL 920 (formerly 905). Intermediate level of English for speakers of other languages. English language skills needed to seek employment and function successfully in the workplace. Unlimited repeats. Lecture. Non-graded.

FAMLF (Family Life)

FAMLF 131 — FAMILY RELATIONSHIPS
3 Units
The family and its interpersonal relationships, the formation and development of the family, adjustment within the family, the family cycle, parenthood, marriage enrichment, dissolution of marriage and remarriage, exploration of resources to strengthen the family. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: E) (CSU-GE: D7,E)(IGETC:4)

FAMLF 242 — PARENT INVOLVEMENT
3 Units
Recommended for Success: Satisfactory completion of CLODV 245 Experience in promoting increased parent involvement and parent education in community programs. Field trips required. Lecture/Other. (Fall) Transfer: CSU

FAMLF 355X,A — THE CHILD IN THE FAMILY
½, 1 Unit
Influences of the family and school on the growth and development of the child from the prenatal stage through the early childhood years. Community resources that impact children. May be completed up to four times. Field trips may be required. Lecture. (A-F or P/NP)

FAMLF 390 — THE PROCESS OF PARENTING
1 Unit
Discussion of child growth and development related to parenting. Background for understanding parent-child relationships. Emphasis on cooperation through effective and mutually respectful communication techniques. Lecture. Three maximum completions. (A-F or P/NP)

FAMLF: NON-CREDIT COURSES

FAMLF 800 — PARENT EDUCATION
Exploration of current issues in parenting. Influences of the family and school on the growth and development of the child. Emphasis on positive and nurturing guidance techniques. Unlimited completions allowed. Field trips may be required. Non-graded.

FDNTR (Food & Nutrition)

FDNTR 219 — NUTRITION
3 Units
Recommended for Success: Satisfactory completion of Laboratory chemistry course in high school or college, or concurrent enrollment. Concepts of nutrient requirements of the body in relation to growth maintenance, and repair at different stages of a normal life cycle; factors influencing normal metabolism; construction of an adequate diet at different ages and food safety and hunger will be examined. (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU, UC (CSU NUTR 110)(CC BIOL 50) General Education: (MJC-GE: A)

FDNTR 320 — DIET IN HEALTH AND DISEASE
3 Units
Recommended for Success: Satisfactory completion of or concurrent enrollment in FDNTR 219 or 351. Collecting data for assessing nutrition status and planning modified diets to meet individual patient needs. Emphasis placed upon application in health care facilities. Field trips may be required. Lecture. (A-F or P/NP)

FDNTR 351 — PRACTICAL NUTRITION
3 Units
Recommended for Success: Laboratory chemistry course in high school or college or concurrently enrolled. Basic principles of nutrition and their application. Hunger, food safety and current nutritional controversies will be examined. (A-F or P/NP) General Education: (MJC-GE: A)

FDP (Food Processing)

The student will acquire skills sufficient for technical employment in the food processing industry. The student may also prepare for transfer to a university food science major by adapting this program in consultation with an advisor. Contact the division office in the Agriculture Building for advising assistance.

FDP 200 — BASIC FOOD PROCESSING
3 Units
Introductory course for work in food processing industry. Methods of food preservation, assurance of quality, laws related to food processing, skills and techniques used by the industry. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

FDP 300 — CERTIFIED PROFESSIONAL FOOD MANAGER TRAINING
1½ Units
Develops a working knowledge and familiarity with technology and strategies to manage food safely from production to consumption. Field trips may be required. Two maximum completions. Lecture. Materials fee required. (A-F Only)

FDP 301 — CERTIFIED HACCP MANAGER TRAINING
1½ Units
Recommended for Success: An understanding of basic food safety program: i.e., GMP's, SSOPs, and fundamentals of sanitation procedures. Elements of hazard analysis and critical control points and how they integrate into a successful food safety program for manufacturers, wholesalers, distributors and food establishment operations with the goal of HACCP certification. Field trips required. Two maximum completions. Lecture. Materials fee required. (A-F Only)
FDSP 342—INTRODUCTORY WINE EVALUATION 1 Unit
Prerequisite: Limited to persons 21 years of age and older. Formerly listed as PLSC 242.
The scientific study of wines, with an emphasis on using precise descriptive language for sensory evaluation: the use of the senses of sight, smell, taste and touch in a disciplined, systematic way to learn about some of the chemical and physical properties of wine. Emphasizes California varietal wines as a basis for learning about varietal wine characteristics to build a foundation for understanding the great wines of the world. Field trips may be required. Lecture/Demonstration. Two maximum completions. Materials fee required. P/NP Only

FDSP 376—BASIC FOOD LABORATORY PROCEDURES 1 Unit
Details of food plant laboratory procedures, emphasis on net weight, fill weight, syrup checking, and statistical quality control. Lecture/Laboratory. (A-F Only)

FDSP 378—FOOD LABORATORY INSTRUMENTS 1 Unit
Operation, principles, importance and care of basic food laboratory instruments. Lecture/Laboratory. (A-F Only)

FDSP 379—FOOD PRODUCTS GRADING 1 Unit
Fundamentals of food products grading. Lecture/Laboratory. (A-F Only)

FDSP 380—FOOD PRODUCTS MICROANALYSIS-A 1 Unit
Training in insect part and fly egg determination in food products. Lecture/Laboratory. (A-F Only)

FDSP 381—FOOD PRODUCTS MICROANALYSIS-B—MOLD COUNTING 2 Units
Instruction in mold count procedures as applied to fruit and tomato products and food plant sanitation. Includes Howard Mold, Geotrichum Mold, and Rot Count methods. Lecture/Laboratory/Other. (A-F Only)

FDSP 382—FOOD PRODUCTS MICROANALYSIS-C 1 Unit
Principles of food bacteriology, use of materials and equipment, tests that identify the presence and number of bacteria important in the food industry. Lecture/Laboratory. (A-F Only)

FDSP 383—ENZYMES IN THE FOOD INDUSTRY 1 Unit
Fundamentals of food enzymes and their use in the food industry; classification, production, activity, use, immobilization and inhibition, modification of food by endogenous enzymes, and the major classes of industrial enzymes. Lecture. (A-F Only)

FDSP 386—FOOD LABORATORY CHEMISTRY PROCEDURES 1 Unit
Basic chemical principles and techniques as they are applied to chemical analysis of foods. Field trips may be required. Lecture/Laboratory. (A-F Only)

FDSP 387—FOOD PROCESSING SANITATION AND CLEANUP 1 Unit
Introduction to the fundamentals of food processing equipment, cleanup and sanitation, types of cleaning agents, residue problems, cleanup methods and techniques. Two maximum completions. Field trips may be required. Lecture. (A-F Only)

FREN 323—CATERING 2 Units
A study of catering principles and application in the production of cold and hot hors d’oeuvres, including vegetables, ham, pork, poultry, seafood, fruit, cheese, mousse and sauces for buffet service. Stresses quality and quantity control and artistic presentation. (A-F or P/NP).

FREN (French)

FREN 51—INTRODUCTION TO PRACTICAL FRENCH 1 3 Units
Basic conversational French for travel, work, or preparation for French 101. Field trips may be required. Lecture. Laboratory arranged. (A-F or P/NP)

FREN 52—INTRODUCTION TO PRACTICAL FRENCH 2 3 Units
Prerequisite: Satisfactory completion of FREN 51. Continuation of FREN 51. Review and expansion of essentials of French grammar and vocabulary through oral expression. (A-F or P/NP)

FREN 101—FRENCH 1 5 Units
Essentials of French grammar and pronunciation; simple composition, conversation, reading. (A-F or P/NP) Equivalent to the satisfactory completion of two years high school French. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 6A)

FREN 102—FRENCH 2 5 Units

FREN 103—FRENCH 3 5 Units
Continuation of FREN 102. Further development of oral expression, reading comprehension, and written expression. Transfer: CSU, UC General Education: (MJC-GE: E2) (CSU-GE: C2) (IGETC: 6A)

FREN 230—FRENCH LITERATURE 3 Units
Introduction to French literature. Major works of literature are examined with emphasis on theme, style, techniques, and their place in the French literary tradition. Lecture. (A-F or P/NP)

FREN 231—FRENCH LITERATURE 2 3 Units
Continuation of FREN 230. Major works of literature are examined with emphasis on theme, style, techniques, and their place in the French literary tradition. Lecture. (A-F or P/NP)

FILM (Film)

FILM 150—FILM PRODUCTION 3 Units
Techniques of motion picture production. Students write scripts; operate camera, sound, lighting, and editing equipment to produce basic film projects. Focus on single camera “film style” techniques utilizing video production equipment. Field trips or off-site filming may be required. Lecture/Laboratory. (A-F or P/NP) Materials fee required. Transfer: CSU, UC

FILM 151—ADVANCED FILM PRODUCTION 1 3 Units
Recommended for Success: Satisfactory completion of FILM 150, RATV 142.
Practical applications in film production. Creative use of camera, sound, editing, and production planning. Students will produce, direct and edit individual projects. This class will provide intermediate experience in group filmmaking, affording expanded areas of responsibility. Each group will produce a twenty-minute feature film. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC

FILM 152—ADVANCED FILM PRODUCTION 2 3 Units
Recommended for Success: Satisfactory completion of FILM 151, RATV 142.
Continuation of FILM 151. Development of leadership skills, directing techniques, and the producing process for the film industry. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC

FILM 153—CONTEMPORARY FILM 3 Units
Introduction to the contemporary film industry from a creative, technical and business perspective. Basic skill development in understanding the language of film, critical thinking and writing. Samples of topics explored include directorial choices, cinematic composition, decoding the ideological message, and film as it relates to popular culture and current affairs. Attendance of first run feature films at local movie theaters is required. Two maximum completions. Materials fee required. Cost of admission to view one film per semester week. Lecture. (A-F or P/NP) Transfer: CSU, UC.

FILM 154—MOVIES WITH A MESSAGE 3 Units
Also offered as RATV 142.
A film appreciation series intended to explore what can be learned about place, culture, history, and the human experience from films, and how movies can shape perceptions, illuminate social issues, and advance political action while examining the aesthetic relationship of subject to style, form, function, and the cultural values of the film maker. May be completed up to two times. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

FILM 155—THE DOCUMENTARY FILM 3 Units
Introduction to the history and theory of documentary film practice through the examination of a variety of documentary films (educational, propaganda, social activist, ethnographic, cinema vérité, etc.) Screening and discussion of selected documentaries will be used to enhance this visual art form. (A-F or P/NP) Lecture. Transfer: CSU Transfer: (MJC-GE: C) (CSU-GE: C1)
FREN 102—FRENCH 2  
Prerequisite: Satisfactory completion of FREN 101. 
Continuation of FREN 101. Review and expansion of tenses, vocabulary, and commonly used expressions. Equivalent to the satisfactory completion of three years of high school French. (A-F or P/NP) Transfer: CSU, UC General Education: (MUC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A)

FREN 103—FRENCH 3  
Prerequisite: Satisfactory completion of FREN 102. 
Review of French grammar, reading and conversational practice. Includes reading and discussion in French of selections from literary works of French writers. Equivalent to the satisfactory completion of four years of high school French. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MUC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A).

FREN 104—FRENCH 4  
Prerequisite: Satisfactory completion of FREN 103. 
Review and expansion of grammatical structures covered in FREN 103. Includes reading and discussion in French of literary works of French and Francophone writers. Field trips may be required. (A-F or P/NP) Lecture/Laboratory. Transfer: CSU, UC General Education: (MUC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A)

FSCI (Fire Science)
The Fire Science curriculum prepares the student for a career in fire service. Students will learn about the organization and operations of fire service, proper use of fire equipment, tactics and strategies of fire fighting, specialized job skills, and management techniques. Fire Science courses dropped or inactivated Fall 1987 to Fall 1988 are valid for students completing those courses prior to deletion from the catalog. For more information, contact the Regional Fire Training Center at 549*7028.

FSCI 301—FIRE PROTECTION ORGANIZATION  
Formerly listed as FSCI 321. 
Introduction to the fire service and fire protection, career opportunities in fire protection and related fields; history of fire protection; fire loss analysis; public, quasi-public and private fire protection services; specific fire protection functions. May be repeated an unlimited number of times. Field trips may be required. Lecture. (A-F Only) Transfer: (CC FIRE 1)

FSCI 302—FIRE PREVENTION TECHNOLOGY  
A basic overview of the role of fire prevention in modern fire service. Identifies the relationship of fire prevention, fire safety education, fire detection and suppression systems. Field trips may be required. Lecture. (A-F Only) Transfer: (CC FIRE 2)

FSCI 303—FIRE PROTECTION EQUIPMENT AND SYSTEMS  
Prerequisite: Satisfactory completion of FSCI 301  
Formerly listed as FSCI 329. 
Portable fire extinguishing equipment, sprinkler systems; protection systems for special hazards; fire alarm and detection systems. Field trips required. Lecture. Not offered every semester. (A-F Only) Transfer: (CC FIRE 3)

FSCI 304—BUILDING CONSTRUCTION FOR FIRE PROTECTION  
Prerequisite: Satisfactory completion of FSCI 301  
Formerly listed as FSCI 326. 
Fundamentals of building construction as it relates to fire protection. Classification by occupancy and types of construction with emphasis on fire protection features including: building equipment, facilities, fire resistive materials and high rise considerations. Field trips may be required. Lecture. (A-F Only) Transfer: (CC FIRE 4)

FSCI 305—FIRE BEHAVIOR AND COMBUSTION  
Theory and fundamentals of how and why fires start, spread, and are controlled, an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents, and fire control techniques. Lecture. (A-F Only) Transfer: (CC FIRE 5)

FSCI 309—FIRE MANAGEMENT 2E  
Prerequisite: Satisfactory completion of FSCI 356  
Provides chief officers or chief officer candidates with knowledge of contemporary management issues and concepts. Key topics include governmental relations, changing settings/policy formulation, program management, personnel, labor relations, and legal environment. May be repeated an unlimited number of times. Materials fee required. (A-F Only)

FSCI 311—RESCUE SYSTEMS 1  
Team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying/hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Unlimited completions. Field trips may be required. (A-F Only) Materials Fee required.

FSCI 322—FIRE SCIENCE CAREER DEVELOPMENT/PROMOTIONS  
Fire Service career development, promotion skills and techniques including mental attitude, resume, written tests, oral interviews, strategies, value and confidence building. Field trips may be required. (A-F Only)

FSCI 323—FIRE HYDRAULICS  
Recommended for Success: Before enrolling this course, students are strongly advised to satisfactorily complete FSCI 301.
Review of applied mathematics, hydraulics laws as applied to the fire service; application of formulas and mental calculation to hydraulics and water supply problems. Lecture. (A-F Only)

FSCI 327—FIRE APPARATUS AND EQUIPMENT  
Recommended for Success: Satisfactory completion of FSCI 301 
Fire apparatus design, specifications and performance capabilities; effective utilization of apparatus in fire service emergencies. Field trips may be required. May be repeated an unlimited number of times. (A-F Only)

FSCI 328—INVESTIGATION OF FIRES  
Prerequisite: Satisfactory completion of FSCI 301  
Determining cause of fires (accidental, suspicious and incendiary); types of fires; related laws, introduction to arson and incendiarism, recognizing and preserving evidence; interviewing witnesses and suspects; arrest and detention procedures; court procedures and giving court testimony. Field trips may be required. Not offered every semester. Lecture. Materials fee required. (A-F Only)

FSCI 332—FIRE FIGHTING TACTICS AND STRATEGY  
Prerequisite: Satisfactory completion of FSCI 301  
Principles of fire control through the utilization of manpower, equipment, and extinguishing agents on the fireground. Field trips may be required. Not offered every semester. Lecture. (A-F Only)

FSCI 336—RESCUE PRACTICES  
Recommended for Success: Satisfactory completion of FSCI 301  
Rescue problems and techniques; emergency rescue equipment, toxic gases; chemicals and diseases; radiation hazards, care of victims, including respiration and resuscitation, extrication, and other emergency conditions. Unlimited completions. Field trips may be required. Not offered every semester. Lecture. (A-F Only)

FSCI 337—WILDLAND FIRE CONTROL  
Prerequisite: Satisfactory completion of FSCI 301  
Introduction to factors affecting wildland fire prevention, fire behavior, and control techniques. May be repeated an unlimited number of times. Field trips may be required. Lecture. (A-F Only) Transfer: (CC FIRE 7)

FSCI 346—INSTRUCTIONAL METHODS FOR FIRE TRAINING OFFICERS  
Prerequisite: Satisfactory completion of FSCI 301  
Provides a variety of methods and techniques to assist a fire training officer in selecting, developing, and organizing materials for in-service training programs. Not offered every semester. Lecture. (A-F Only)
FSCI 347—FIRE PREVENTION 1C  
Prerequisites: Satisfactory completion of FSCI 354 and 355.  
2 Units  
Designed to provide fire service personnel with the third phase of State Certified Fire Prevention instruction. Includes instruction on flammable and combustible liquid hazards, storage, and extinguishment. Field trips may be required. Lecture. Materials fee will be required to pay for student's certificate and manual. Not offered every semester. (A-F Only)  

FSCI 350—FIRE COMMAND 1A  
Prerequisite: Satisfactory completion of FSCI 301 or equivalent.  
2 Units  
Designed to provide the prospective or active fire company officer with information and experience in command techniques. Emphasizes decision-making, act of commanding, authority to command, organization structure. Planning and training for effective performance of a fire company officer at the scene of an emergency. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 351—FIRE COMMAND 1B  
Prerequisites: Satisfactory completion of FSCI 301 and 350.  
2 Units  
Prepares fire officers for command of various emergency incidents. Emphasizes development of management and decision-making practices required for success. Topics include use of the incident command system to manage major disasters, wildland fires, multi-casualty and hazardous materials incidents. Field trips may be required. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 352—TRAINING INSTRUCTOR 1A  
Prerequisite: Satisfactory completion of FSCI 301  
2 Units  
Designed to provide the prospective or active fire company officer with a variety of methods and techniques for training fire service personnel in accordance with latest concepts in vocational education. Emphasizes teaching technical lessons, evaluating teaching and learning efficiency and the application of principles of learning through practice teaching demonstrations. Unlimited completions. Lecture/Laboratory. Materials fee required. Applicable to the associate degree (A-F Only)  

FSCI 353—TRAINING INSTRUCTOR 1B  
Prerequisite: Satisfactory completion of FSCI 352  
2 Units  
Designed to provide the prospective or active fire company officer with knowledge of the selection, development, organization and utilization of instructional materials for teaching technical lessons. Structured to provide fire service personnel with the professional preparation leading to standard-designated subjects instructor qualification. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 354—FIRE PREVENTION 1A  
Prerequisite: Satisfactory completion of FSCI 301  
2 Units  
Designed to provide prospective or active Fire Company Officer and Fire Prevention personnel with basic fire prevention information. Structured to prepare the student for responding to a variety of fire prevention situations in a professional and effective manner. Field trips may be required. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 355—FIRE PREVENTION 1B  
Prerequisites: Satisfactory completion of FSCI 301 and 354.  
2 Units  
Designed to provide fire service personnel with the second phase of state certified fire prevention instruction. Includes instruction on private water systems, fixed fire extinguishing, detection and alarm systems. Field trips required. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 356—FIRE MANAGEMENT 1  
Prerequisite: Satisfactory completion of FSCI 301  
2 Units  
Designed to provide the fire service student with instruction in the elements of organizational process, demonstration of growth and development in the use of managerial skills, applications of the course content to fire service work and personal life, location and use of managerial resources, and development of an action plan. Field trips may be required. Lecture/Laboratory. Materials fee will be required to pay for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 357—FIRE INVESTIGATION 1A  
Prerequisite: Satisfactory completion of FSCI 301  
2 Units  
Examines the national arson problem, fire investigation responsibilities, conduct of the investigator, fire chemistry, heat energy sources and explosive conditions; fire investigation techniques and legal aspects of fire investigation. Field trips required. Lecture/Laboratory. Materials fee will be required to pay for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 362—BASIC FIRE ACADEMY  
Prerequisites: Satisfactory completion of FSCI 301  
17 Units  
Enrollment limited to students who have passed a physical agility test and have a valid CPR card. Students must possess both a valid CPR card, an EMT or forty-hour First Responder card.  
Introduction to fundamental knowledge and skills of a fire fighter as set by the State Fire Marshal. Successful completion of the course fulfills educational requirements for Fire Fighter 1, and meets most Fire Department entry-level testing prerequisites. Lecture/Laboratory. Materials fee required. Field trips may be required. Lecture/Laboratory. (A-F Only)  

FSCI 364—FIRE APPARATUS DRIVER/OPERATOR 1A  
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete FSCI 362.  
2 Units  
Enrollment limited to students who possess a valid California Driver’s License, class B, firefighter-restricted minimum.  
Transfer: (CC FIRE 29A + 29B)  

FSCI 365—EMERGENCY AID FIRST RESPONDER  
1 Unit  
Designed to train fire and police personnel who are First Responders how to render emergency care until paramedics arrive at the scene. Lecture/Laboratory. Students must also submit a letter of health to the Fire Training Center. Not offered every semester. (A-F Only)  
Transfer: (CC EMS 157)  

FSCI 367—FIRE INVESTIGATION 1B  
Prerequisite: Satisfactory completion of FSCI 257  
2 Units  
Provides deeper understanding of fire investigation and builds on Fire Investigation 1A. Topics include: the juvenile fire-setter, report writing, evidence preservation and collection, interview techniques, motives, and fire fatalities. Field trips may be required. Materials fee required. (A-F Only) One completion allowed.  

FSCI 371—FIRE COMMAND 2A  
Prerequisite: Satisfactory completion of FSCI 350  
Formerly listed as FSCI 371A.  
2 Units  
Prepares fire officers to use management techniques and incident command system when commanding multiple alarms or large combat forces. Field trips may be required. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 372B—FIRE MANAGEMENT 2B  
Prerequisite: Satisfactory completion of FSCI 356  
2 Units  
Covers the purpose of budgeting, budget controls, types of budgets and budget systems and justifying budgets. Field trips may be required. Lecture. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)  

FSCI 373—FIRE INSTRUCTOR 2A  
Prerequisites: Satisfactory completion of FSCI 352 and 353.  
Formerly listed as FSCI 373A.  
2 Units  
Provides fire service instructor with the techniques of evaluation. Construction of written and performance tests, as well as test planning, analysis, security and evaluation of results. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)
FSCI 374 — FIRE INSTRUCTOR 2B  
2 Units  
Prerequisites: Satisfactory completion of FSCI 352 and 353.  
Formerly listed as FSCI 373B.  
Designed to develop leadership skills. Group dynamics, problem-solving techniques and interpersonal relations development to utilize in staff meetings and brainstorming sessions. Skills for public meetings such as panel discussions and forums. Interactive team teaching is also included. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)

FSCI 375 — FIRE INSTRUCTOR 2C  
2 Units  
Prerequisites: Satisfactory completion of FSCI 352 and 353.  
Principles of media in the instructional process; selection of audio-visual and instructional media; employment of basic and advanced forms of instructional media; use of computers in the instructional process; individualized instruction programs. Field trips may be required. Lecture/Laboratory. Materials fee required for State Fire Marshal Certificate and student manual. Not offered every semester. (A-F Only)

FSCI 381 — ETHICS OF LEADERSHIP COURSE 1  
3 Units  
Prerequisite: Satisfactory completion of FSCI 362.  
Enrollment limited to Public Safety Personnel.  
First of a four-course series of the California Public Safety Leadership and Ethics Program. Course will build comprehension of the roles and responsibilities through concepts, examples, and practice. Explores current issues in human resource management encompassing workforce diversity as well as an overview of political and legal issues, to include civil rights laws. (A-F Only). Applicable to the Associate Degree. Materials fee required.

FSCI 382 — ETHICS OF LEADERSHIP COURSE 2  
3 Units  
Prerequisite: Satisfactory completion of FSCI 362.  
Enrollment limited to Public Safety Personnel.  
Second of a four-course series of the California Public Safety Leadership and Ethics Program. Course is designed to provide the participant with the knowledge, skills, and abilities to effectively lead others and explore issues with diversity more in-depth as well as additional ethics explorations and issues. (A-F Only). Applicable to the Associate Degree.

FSCI 398A-D,X,Z — FIRE SCIENCE SPECIAL TOPICS  
½-3 Units  
Prerequisites: Satisfactory completion of FSCI 301 or equivalent.  
These special topics consist of short courses on specific fire agency training needs. Emphasis is on updating recently available skills, information or technology that has a direct impact on specific agency or fire problems. Course content varies with the agency training needs studied. Four maximum completions. Lecture/Laboratory depending on topic. Not offered every semester. Materials fee required. (A-F Only)

GEOG 101 — PHYSICAL GEOGRAPHY  
3 Units  
Recommended for Success: Satisfactory completion of ENGL 101  
Physical elements of geography: emphasis on earth-sun relationships, weather, climate, and vegetation patterns; degradation processes, landforms created through glaciation, water, wind and tidal activity, and human impact upon the environment. Field trips may be required. (A-F or P/NP) Approved for on-line and hybrid instruction. Transfer: CSU, UC (TCSU GEOG 120) (CC GEOGR 12) General Education: (MJC-GE: B) (CSU-GE: D5) (IGETC: 4)

GEOG 102 — CULTURAL GEOGRAPHY  
3 Units  
Recommended for Success: Satisfactory completion of ENGL 101  
Introduction to origins and global distribution of cultures. Examines cultural adaptations to the earth, human modifications of the landscape, and patterns of human organization as exemplified in population, agriculture, language, religion, political organization, popular culture, and economic development. Issues addressed include famine, political conflict, multiculturalism, suburban sprawl, industrial relocation and third world development. Approved for online, hybrid and telecourse instruction. Transfer: CSU, UC (TCSU GEOG 120) (CC GEOGR 12) General Education: (MJC-GE: B) (CSU-GE: D5) (IGETC: 4)

GEOG 104 — CALIFORNIA GEOGRAPHY  
3 Units  
Introduction to California’s unique geography; examining political, economic, cultural, physical, and historical processes and characteristics. Field trips may be required. Lecture. Not offered every semester. Transfer: CSU, UC General Education: (MJC-GE: B)

GEOG 105 — ECONOMIC GEOGRAPHY  
3 Units  

GEOG 109 — INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS  
3 Units  
Also offered as ENSCI 109.  
Introduction to Geographical Information Systems (GIS). GIS centers upon mapping as a tool for identifying and assessing spatial relationships of human activity. Applications to business, economics, weather, geology, agriculture, etc. Students will create, apply and evaluate databases which generate maps. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC (CC GEOGR 18) General Education: (MJC-GE: B) (CSU-GE: D5) (IGETC: 4)

GEOG 110 — WORLD REGIONAL GEOGRAPHY  
3 Units  
Survey of the world’s major geographical regions and their physical, economic, political, and cultural characteristics. Emphasis is placed upon historical influences which explain current problems and conditions. Lecture. Transfer: CSU, UC (CC GEOGR 18) General Education: (MJC-GE: B) (CSU-GE: D5) (IGETC: 4)

GEOL 160 — INTRODUCTION TO GEOLOGY  
3 Units  
Study of the composition of the earth, and the physical and chemical processes which shape it. Topics include plate tectonics, volcanism, earthquakes, rocks and minerals, weathering, and erosion. Credit will be granted for either GEOL 160 or 161. Field trips may be required. Lecture. Material fees may be required. Not offered every semester. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: 5A)
GEOL 161—PHYSICAL GEOLOGY  4 Units
Formerly listed as GEOL 160.
Study of the physical and chemical processes that shape the earth, including plate tectonics, volcanoes, weathering, and erosion; the composition of the earth; and geologic hazards, such as mass wasting, flooding and earthquakes. Laboratory topics include rock and mineral identification, and the use of maps and aerial photographs to understand erosional and tectonic processes. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC; General Education (M UC-GE: A) (CSU-GE: B1,3) (IGETC: 5A)

GEOL 165—GEOL 165—GEOL 165—GEOL OF CALIFORNIA  3 Units
The geologic setting and evolution of California’s geographic provinces. Emphasis is on processes that have and are still acting to shape the landscape: volcanism, earthquakes, and erosion. Field trips may be required. Lecture. Transfer: CSU, UC; General Education (M UC-GE: A) (CSU-GE: B1,3) (IGETC: 5A)

GEOL 166—HISTORICAL GEOLOGY  4 Units
Formerly listed as GEOL 163.
Introduction to the origin, development and evolution of the earth and its inhabitants. Topics include the study of fossils and rocks, continents and ocean basins, geologic time, plate tectonics, climate change and mass extinctions. Laboratory utilizes rocks, fossils and stratigraphic principles to decipher ancient environments. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC; General Education (M UC-GE: A) (CSU-GE: B1,3) (IGETC: 5A)

GEOL 171X,A,B—GEOL 171X,A,B—GEOL 171X,A,B—GEOL FIELD STUDIES  ½,1,2 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete or to concurrently enroll in a geology or earth science course. Introduction to basic geological concepts through field trips to areas of geologic significance. Emphasis will be on the materials and structures that compose a landscape, and the history and evolution of the areas visited. Field trips required. Four maximum completions. Lecture/Laboratory. Transfer: CSU, UC; General Education (M UC-GE: A) (CSU-GE: B1,3) (IGETC: 5A)

GEOL 174—GEOL 174—GEOL 174—GEOL SUMMER FIELD STUDIES  3 Units
Recommended for Success: Satisfactory completion of previous course in geology or earth science. Application of principles of geology through extended field studies at selected sites in the western United States and other geologically significant locations. Skills developed in rock, mineral, and fossil identification, and use of geological field equipment. Requires ability to work and study under rigorous conditions. Lecture/Laboratory. Field trips may be required. One completion allowed. Materials fees required. Transfer: CSU

GERON (Gerontology)

GERON 101—AGING IN AMERICA  3 Units
Formerly listed as HUMS 104.
Analysis of the aging process from a multidisciplinary approach, including sociology, psychology, and physiology. Students will have an opportunity to explore their beliefs, feelings and values regarding the aged population. Field trips may be required. Lecture. Transfer: CSU

GUIDE (Guidance)

The Guidance program is an integral part of the counseling services. Students who take guidance skills courses will learn to:

- Acquire, organize and demonstrate problem-solving and decision-making skills;
- Explore, evaluate and pursue career and educational options;
- Develop social, intellectual and emotional competencies; develop needed skills and strategies to maximize the educational experience;
- Understand themselves, others and their environment to enable them to develop individual value systems and life styles.

One of the following courses must be taken to fulfill the guidance graduation requirement: GUIDE 109, 110, 111, 112, 116, or 120. Students should enroll in a Guidance class their first semester of attendance at MJC.

GUIDE 109—ORIENTATION FOR FOREIGN STUDENTS  1 Unit
Education and career planning for students whose previous education has been outside the United States. Acquaints students with the college, its curriculum, facilities, services, academic regulations, vocational and certificate programs, degree and transfer requirements. Reviews extra curricular activities, personal adjustment, American customs, culture shock, survival techniques and immigration regulations. A detailed educational plan is developed. Students must complete a conference with a counselor during the semester. Lecture. Transfer: CSU (CC GUIDE 101)

GUIDE 110—EDUCATIONAL PLANNING  ½ Unit
Acquaints students with the college, its curriculum, facilities, services, academic regulations, vocational and certificate programs, degree and transfer requirements. An educational plan is developed according to each student’s needs and goals. Lecture. Transfer: CSU (CC GUIDE 107)

GUIDE 111—CAREER AWARENESS  1 Unit
Assists students in exploring career alternatives through development of skills necessary for the research, selection and planning of a lifelong career. The role of aptitudes, interests, values, and skills will be addressed. Interests, aptitude and values tests may be used. Important aspects of occupational choice will be covered along with occupational information. An educational plan will be developed. Students must complete a conference with a counselor during the semester. Lecture. Transfer: CSU (CC GUIDE 101)

GUIDE 112—JOB DEVELOPMENT SKILLS  ½ Unit
Realties of the job market and techniques for conducting a successful job search. Emphasis on learning job application procedures, resume-writing, and interview techniques. Students must complete a conference with a counselor during the semester. Two maximum completions. Lecture. Transfer: CSU (CC GUIDE/ BUSAD 25)

GERM (German)

GERM 51—INTRODUCTION TO PRACTICAL GERMAN 1  3 Units
Introduction to the essentials of spoken and written German with emphasis on daily life situations, travel and occupation.

GERM 52—INTRODUCTION TO PRACTICAL GERMAN 2  3 Units
Prerequisite: Satisfactory completion of GERM 51. Continuation of GERM 51. Review and expansion of essentials of spoken and written German.

GERM 101—GERMAN 1  5 Units
Essentials of written and spoken German, simple composition, conversation and reading. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC; General Education (M UC-GE: C) (CSU-GE: C2) (IGETC: 6A)

GERM 102—GERMAN 2  5 Units
Prerequisite: Satisfactory completion of GERM 101. Continuation of GERM 101. Review and expansion of tenses, vocabulary, and commonly used expressions. Equivalent to the satisfactory completion of three years of high school German. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC; General Education (M UC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)
GUIDE 116—ORIENTATION FOR RE-ENTRY ADULTS 2 Units
For the adult student who is re-entering the educational system. The conflicts and opportunities of modern society are examined as they affect the student. Personal, educational and career goals are reviewed in the context of aptitudes, interests and values. Decision making is examined as it relates to achieving personal goals. Review of the role and function of higher education, community college education and the MJC curriculum. Conducted in an informal group setting. Includes guest speakers and audio visual presentations. Students must complete a conference with a counselor and develop an educational plan during the semester. Lecture. (P/NP Only) (MJC Guidance) Transfer: CSU, UC

GUIDE 120—SUCCESS STRATEGIES FOR TRANSFER STUDENTS 3 Units
Formerly listed as STSK-120.
Increases success in college by assisting students in obtaining skills and techniques necessary to reach their educational objectives. Explore personality, interests and values to increase self-understanding and select an appropriate major and career. Topics include: educational planning and transfer strategies, motivation, paper research strategies, note-taking, subject specific study techniques, time management and textbook study methods. Lecture. (A-F Only). (MJC Guidance) Transfer: CSU, UC

HE (Health Education)
The expanding field of health education through public or community agencies and the schools will require trained professionals for positions of leadership and supervision. The professionals will be dealing with such complex issues as physical and mental well-being, substance abuse, exercise, environmental and consumer health, disease control, human sexuality, family relations, death and dying, first aid and emergency care. Since careers in the Health Education field usually require a minimum of a four-year degree, health education majors at MJC are given an introduction to health through basic health and safety courses and are advised to follow general education and transfer requirements for four-year colleges and universities.

HE 100—STANDARD FIRST AID/CPR 1 Unit
A basic course for an Emergency Services professional or the citizen who wishes to maintain or acquire Cardiopulmonary Resuscitation (CPR) and Basic First Aid Certification. Successful course completion results in American Red Cross certification in CPR and Standard First Aid. Four completions allowed for certification renewal. Materials fee required. Lecture. Transfer: CSU, UC (CC H-HP 62)

HE 101—EMERGENCY RESPONSE/CPR FPR 3 Units
Course designed to provide the First Responder with advanced first aid capabilities necessary in an emergency to help sustain life, reduce pain, minimize the consequences of injury or sudden illness and to provide emergency care and transportation of the sick and injured. American Red Cross certification issued upon satisfactory completion. May be repeated three times for certification renewal. Lecture. Materials fee required. (A-F or P/NP) Four completions allowed. Transfer: CSU, UC (CC EMS 13)

HE 110—HEALTHFUL LIVING 3 Units

HE 111—WOMEN'S HEALTH ISSUES 3 Units

HE 118—EXERCISE AND NUTRITION FOR HEALTHY LIVING 3 Units

HE 198A,B,C—SPECIAL TOPICS AND PROBLEMS 1-3 Units
Participation in discussion, analysis, and evaluation of a special topic or problem in health education. Topics announced each semester in schedule of classes. Field trips may be required. Four maximum completions. Lecture. Transfer: CSU

HIST (History)
HIST 101—HISTORY OF THE UNITED STATES THROUGH RECONSTRUCTION
Recommended for Success: Satisfactory completion of ENGL 101
U.S. history from pre-colonial indigenous America to the late 19th century. Causes, variations, and impacts of colonialism on Indigenous African and European Americans. The movement toward national independence and the Revolutionary War will be examined. The constitution and resulting institutions will be analyzed. National expansion, reform and resulting regional/sectional social and political developments through the U.S. Civil War. Regional social, economic, and political analyses will emphasize the California State Constitution and local government. This course uses the early evolution of the relationships between local, State and Federal governments as a comparative framework for understanding contemporary relationships between local, State and Federal governments. Lecture. Transfer: CSU, UC (CC HIST 16) (TCSU HIST 130) General Education: (MJC-GE B) (CSU-GE: D6) (IGETC: 4)

HIST 102—HISTORY OF THE UNITED STATES POST CIVIL WAR
Recommended for Success: Satisfactory completion of ENGL 101
U.S. history from the late 19th century until contemporary times. Local, state and national historic development will be traced with emphasis placed on American institutions and their role in the development of American culture. Special attention to U.S. urban and industrial processes, the country’s internatinal role and resulting institutional developments. The role of class and ethnicity will be integrated with comparisons tracing Europeans, Indigenous, and African American experiences. Analysis of the role of technology in the formation of America. The evolution of contemporary local, State and Federal governments as they relate to politics, economics and social movements is addressed. The gradual movement toward full inclusion of all peoples of America under State and Federal Constitutional law is emphasized. Lecture. Transfer: CSU, UC (CC HIST 17) (TCSU HIST 140) General Education: (MJC-GE B) (CSU-GE: D6) (IGETC: 4)

HIST 104—WESTERN CIVILIZATIONS
Recommended for Success: Satisfactory completion of ENGL 50
Survey of the social, economic, political, religious, intellectual, and cultural development of Western Civilization from the Neolithic to the Reformation. The course will emphasize a comparative approach to the study of ancient Mesopotamia, Egypt, and classical Greece, as well as between Rome and Byzantium. The last part of the course will stress the rise of Western Europe during the Middle Ages up to 1600, with special attention on its economic and political transformations. The development and expansion of the major monotheistic religions (Judaism, Christianity, and Islam) will be central to this course. Lecture. Transfer: CSU, UC General Education: (MJC-GE C) (CSU-GE: D6) (IGETC: 4)

HIST 105—WESTERN CIVILIZATION
Survey of the political, economic, social and cultural changes in the history of Western civilization from 17th century Absolutism to the present. Lecture. Transfer: CSU, UC General Education: (MJC-GE C) (CSU-GE: D6) (IGETC: 4)
HIST 106 — WORLD CIVILIZATION TO THE 16TH CENTURY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
A comparative and interactive investigation and analysis of World Civilization as related to the development of the modern world. Five geographic regions surveyed include: North America, South America, Asia/Pacific Rim, Europe, and Africa. Students will become acquainted with the major events and significant trends in world history from antiquity to the sixteenth century. Historical methodologies and interpretations will be addressed through analysis of political, economic, technological, social and cultural commonalities and differences between civilizations. World civilization examines issues relevant to understanding race, culture, ethnicity, class, gender, religion, disability and sexualities in human history. Field trips may be required. Lecture. Transfer: CSU, UC (CC HIST 13) (IGETC: 3B,4) (MJC-GE: B) (CSU-GE: C2, D6) (IGETC: 3B,4)

HIST 107 — WORLD CIVILIZATION FROM THE 16TH CENTURY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
A comparative and interactive investigation and analysis of World Civilization as related to the development of the modern world. Five geographic regions surveyed include: North America, South America, Asia/Pacific Rim, Europe, and Africa. Students will become acquainted with the major events and significant trends in world history from the sixteenth century to the modern time. Historical methodologies and interpretations will be addressed through analysis of political, economic, technological, social and cultural commonalities and differences between civilizations. World civilization examines issues relevant to understanding race, culture, ethnicity, class, gender, religion, disability and sexualities in human history. Field trips may be required. Lecture. Transfer: CSU, UC (CC HIST 14) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 3B,4)

HIST 112 — TWENTIETH CENTURY AMERICA 3 Units
Explores the political, economic, social and cultural developments of twentieth century United States history. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4)

HIST 113 — SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES PRIOR TO THE 20TH CENTURY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101

HIST 115 — ECONOMIC HISTORY OF THE UNITED STATES 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
Also offered as ECON 115.
Analysis of origins and development of business, labor and agriculture from the colonial period to the present. Emphasis on the federal government's part in the development and regulation of business, labor and agriculture; the government's role in the national economic process. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D2, D6) (IGETC:4)

HIST 116 — WOMEN IN AMERICAN HISTORY 3 Units
Review and evaluation of the role of women in the United States and their contributions from the pre-colonial period to the present viewed within the context of United States and global experiences. The diversity of experience, according to socioeconomic class, ethnicity, religion, region, and sexual orientation, will be emphasized, including Native American Indian, African American, European American, Latina, and Asian American women in the United States history. Lecture. Transfer: CSU, UC (CC HIST 21) General Education: (CSU-GE: D6) (IGETC: 4)

HIST 119 — SOCIAL AND CULTURAL HISTORY OF 20TH CENTURY AMERICA 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
Formerly listed as HIST 113.
Examines the development of American society and culture in the 20th and 21st centuries. Specifically analyzes American political and economic institutions and their interaction with Latino/Chicano, African American, European and Asian American ethnicities. Particular attention is given to various historic and contemporary civil and human rights movements. Critical evaluation of the developing role of local, State and Federal government in the inclusion of ethnic and gender participation. The gradual movement toward full protection of all peoples of America under State and Federal constitutional law is emphasized. The effects of U.S. foreign and domestic policies on first and third world nations will be evaluated. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4)

HIST 125 — HISTORY OF MEXICO 3 Units
Introduction to the history of Mexico from the pre-European conquest of Mesoamerica to the present. Emphasizes the social, political, economic, and cultural repercussions of the conquest of Mexico by Spain, the development of a Mexican identity during and after the colonial period; the causes, nature, and consequences of the wars for independence; the pains of nationhood; the modernization of Mexico during the rule of Porfirio Díaz; and the Mexican revolution and its aftermath. Special attention will be given to the issues of class, race, ethnicity, gender, and religion. Lecture. Field trips may be required. Transfer: CSU, UC General Education: CSU-GE: D3, D6) (IGETC: 4F)

HIST 128 — HISTORY OF THE AMERICAN FAR WESTERN FRONTIER 3 Units
A regional history of frontier life in the trans-Mississippi West during the 19th century, including early exploration through the fur trade, territorial expansion, and the mining and farming frontier. Special emphasis is given to the contribution of Native Americans and Asian, African, Iberian, and Mexican cultures in shaping the character of the American West. (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU, UC (CC HIST 55) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F)

HIST 129 — HISTORY OF CALIFORNIA 3 Units
California from pre-Colonial times to the present. Includes social, economic, political and cultural topics. Special emphasis is given to the contribution of Native Americans and Asian, African, Iberian, and Mexican cultures in shaping the character of California. Lecture. Transfer: CSU, UC (CC HIST 11) General Education: (CSU-GE: D6) (IGETC: 4)

HIST 145 — LATIN AMERICAN HISTORY 3 Units
Latin American history from the pre-conquest to the present; emphasizes changes and continuities in the political, economic, social, and cultural life of the continent. Examines issues of development and underdevelopment, ideas of race and ethnicity, relationship to the outside world, the construction of the nation-state, gender and social movements. Lecture. Transfer: CSU, UC General Education: (CSU-GE: D3, D6) (IGETC: 4)

HIST 146 — AFRICAN AMERICANS THROUGH THE 19TH CENTURY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
A political, economic, technological and social history of African-American culture from early African forms through late 19th century America. Specific analysis of complex relationships between European, indigenous American and African-American ethnic groups. This means frank inquiry into race, gender, and class disparities. Special emphasis on contributions to American society and culture by Black peoples. Comparisons of ethnic inclusion struggles and marginalization. Emphasis on the evolution of State and Federal Constitutional government and the principle of ethnic parity, disparity, and inclusion. Contemporary and historic local, State, and Federal government developments are analyzed in relation to political and social movements as a foundation for contemporary activism for human rights, and economic justice. Field trips may be required. Lecture. Transfer: CSU, UC (CC HIST 20) General Education: (MJC-GE: B) (CSU-GE: D3, D6) (IGETC: 4)
HIST 155 — AFRICAN AMERICANS IN THE 20TH AND 21ST CENTURIES 3 Units
Recommended for Success: ENGL 101
A political, economic, technological, and social history of African Americans from the end of the 19th century through the early 21st century. Specific analysis of complex relationships between European Americans, Latino/Chicano Americans, and African American ethnic groups. This means frank inquiry into race, gender, and class disparities. Ongoing struggles for ethnic self-determination and inclusion are contrasted against institutional resistance and social marginalization. Emphasis on the evolution of State and Federal Constitutional government and the struggle for ethnic parity, disparity, and inclusion. Contemporary and historic local, State, and Federal government developments are analyzed in relation to political and social movements as a foundation for contemporary activism for human rights, and economic justice. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D3, D6) (IGETC: 4)

HUMAN (Humanities)

HUMAN 101 — INTRODUCTION TO THE HUMANITIES 3 Units
Recommended for Success: Eligibility for ENGL 101
Introduction to major works of the humanities. Focuses on the diversity of human experience and the relationships among arts and ideas. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC (HUMAN 1) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 105 — EARLY HUMANISTIC TRADITIONS 3 Units
Recommended for Success: Eligibility for ENGL 101
Examination of creative and intellectual achievements from cultures of the world beginning with Prehistory and extending to the Renaissance. Lecture. Field trips may be required. (A-F or P/NP) Transfer: CSU, UC (HUMAN 1) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 106 — HUMANITIES IN THE MODERN WORLD 3 Units
Recommended for Success: Eligibility for ENGL 101
Study of creative and intellectual achievements from cultures of the world, beginning with 1600’s and extending into the 20th centuries. Lecture. Field trips may be required. Not offered every semester. (A-F or P/NP) Transfer: CSU, UC (HUMAN 1) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 110 — EAST MEETS WEST 3 Units
Recommended for Success: Eligibility for ENGL 101
Differences between Eastern and Western world cultures are explored. Works studied are chosen from the fields of art, music, philosophy, literature and/or architecture. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC (HUMAN 1) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 130 — INTRODUCTION TO WESTERN RELIGIONS 3 Units
Origins and development of the three monotheistic religions of Western civilization, Judaism, Christianity, and Islam: scripture, beliefs, traditions, rituals, and celebrations; scriptures of all three faiths, along with the architecture and art. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 140 — INTRODUCTION TO WORLD MYTHOLOGY 3 Units
Recommended for Success: Eligibility for ENGL 101
An overview of mythology which examines the nature, functions, and meanings of myths throughout the world, their cultural contexts, artistic expressions, and influence on contemporary life. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

HUMSR (Human Services)

The Modesto Junior College Human Services programs provide knowledge and skills involved with the delivery of a wide variety of social services through various community social work and counseling agencies.

The two-year programs are designed to prepare students for entry-level employment in human service organizations as well as to upgrade current employees. They also provide a basis for future academic training leading to degrees in Social Work, Sociology, and Psychology.

HUMSR 40 — INDEPENDENT LIVING SKILLS AND ACTIVITIES 1½ Units
Formerly listed as "Independent Living Skills"
Non-degree course.
Provides foster youth ages 16-18 with the knowledge, information, survival skills and activities for daily living and foundation to transition from foster care to living independently in the community. Field trips may be required. (P/NP Only)

HUMSR 101 — INTRODUCTION TO HUMAN SERVICES 3 Units
Development of human services in American society by private and governmental agencies at national, state, and local levels. Emphasis on contemporary programs and practices, needs served, and projected changes. Preparation for "new careers" in paraprofessional programs in the health, education and social services, such as eligibility workers, counselor aides, vocational rehabilitation aides, social service technicians, and pre-professional positions. Field trips may be required. Lecture. Transfer: CSU General Education: (MJC-GE: B)

HUMSR 103 — INTRODUCTION TO HUMAN SERVICE CAREERS ½ Unit
Introduction to careers in the human services profession, personal qualities, clinical skills, and academic requirements necessary for entry-level human service positions. (A-F or P/NP) Lecture. Transfer: CSU

HUMSR 104 — AGING IN AMERICA 3 Units
Also offered as GERON 101.
Analysis of the aging process from a multidisciplinary approach, including sociology, psychology, and physiology. Students will have an opportunity to explore their beliefs, feelings, and values regarding the aged population. Field trips may be required. P/NP Only option. Lecture. Transfer: CSU

HUMSR 110 — INTRODUCTION TO INTERVIEWING, COUNSELING 3 Units
Recommended for Success: Satisfactory completion of ENGL 101.
Introduction to the principles and practices of interviewing, counseling, and theoretical frameworks. Designed to assist in the preparation of paraprofessionals in the Human Services and other interrelated fields. Recognition and understanding of social problems, and the impact on human behavior. (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU

HUMSR 111 — COUNSELING IN CHEMICAL DEPENDENCY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
Concepts of counseling, therapy, personality development, and theoretical frameworks relevant to chemical dependency. Designed to assist the paraprofessional in the chemical dependency profession and other related fields. Clinical skills, assessment tools, techniques, crisis intervention strategies, and resolution will be covered. (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU

HUMSR 113 — CO-OCCURRING DISORDERS 3 Units
Introduction to the treatment needs of individuals who are diagnosed with a psychiatric disorder in combination with a chemical dependency disorder. Students will learn to identify, assess, and offer treatment to those with a dual diagnosis/co-occurring disorder. One completion allowed. Field trips may be required. (A-F only) Lecture. Transfer: CSU
HUMSR 114—DEATH AND DYING 3 Units
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Exploration of feelings, belief systems, values and theoretical comprehension about death, dying, and the bereavement process from a historical, multidisciplinary, and cultural perspective. Topics include coping mechanisms, counseling the dying, suicide, grief and bereavement, terminal illness, and multi-cultural concepts about death. (A-F or P/NP). Lecture. Transfer: CSU (CC SOCIO 28) General Education: (MUC-GE B)

HUMSR 116—DRUGS AND ALCOHOL IN SOCIETY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
An introductory course that focuses on drugs and alcohol use, abuse, and dependency in society. Covers causes for addiction, current trends, historical dimensions, prevention, treatment, multicultural considerations, and corresponding myths regarding chemical dependency and psychoactive drugs. (A-F or P/NP). Transfer: CSU

HUMSR 117—INTERVENTION AND TREATMENT STRATEGIES IN CHEMICAL DEPENDENCY 3 Units
Recommended for Success: Satisfactory completion of ENGL 101
Prerequisite: Satisfactory completion of HUMSR 111 and 116.
Continued development in the application of therapeutic techniques, clinical skills, and strategies relative to the treatment of chemical dependency. Emphasizes the intervention process, assessment tools, crisis counseling, theoretical foundations, recovery dynamics, and family systems. (A-F or P/NP). Transfer: CSU

HUMSR 118—PHARMACOLOGY OF ABUSED SUBSTANCES 3 Units
Also listed as PSYCH 118.
Recommended for Success: HUMSR 116 or PSYCH 101.
An introduction to psychopharmacology and the process of drug addiction. Topics include classification of abused and psychotherapeutic drugs, basic principles of pharmacology, behavioral and psychological effects of drugs, major neurotransmitter systems and how they are influenced by drugs. Lecture. Transfer: CSU

HUMSR 119—INTRODUCTION TO GROUP LEADERSHIP AND GROUP PROCESS 3 Units
An introduction to the dynamics of group interaction with an emphasis upon the individuals' subjective experience as the group studies itself (under supervision). The factors involved in problems of communication, effective emotional responses, and personal growth will be highlighted. Emphasis on group process as a means of changing individual behavior. Field trips may be required. (A-F only)
One completion allowed. Lecture. Transfer: CSU

HUMSR 120—PROFESSIONAL DEVELOPMENT IN THE HELPING PROFESSIONS 3 Units
Formerly listed as "Professional Development in Chemical Dependency"
Recommended for Success: Satisfactory completion of ENGL 101.
Focuses on the application of clinical skills, theoretical foundations, strategies, techniques, ethical standards, and professional development in the Human Services and Chemical Dependency profession. (A-F or P/NP). Applicable to the Associate Degree. Transfer: CSU

HUMSR 121—INTRODUCTION TO PSYCHOSOCIAL REHABILITATION 3 Units
Introduction to the field of psychosocial rehabilitation and its application in the public mental health system. The class provides an overview of the core practice models, principles, theories, and methods in psychosocial rehabilitation as related to the social sciences, and gives students a broad view of best clinical practices, social and psychological considerations in working with individuals who have psychiatric disorders using sociological concepts, theories, and methodology. Applicable to the associate degree. Field trips may be required. Lecture. (A-F or P/NP). Transfer: CSU (MJC-GE B) General Education: (MUC-GE B)

HUMSR 143—PSYCHOSOCIAL REHABILITATION PRACTICE 3 Units
Continued development in the field of psychosocial rehabilitation, and its application in the public mental health system. Designed to provide opportunities for students to practice and apply models of psychosocial rehabilitation, principles, theories, and methods related to the social sciences with individuals who have psychiatric disorders using sociological concepts and methodology. Course is not repeatable. Field trips may be required. Lecture. (A-F or P/NP). General Education: (MUC-GE B)

HUMSR 144—COMMUNITY AGENCY PRACTICUM 1 Unit
Formerly listed as HUMSR 145.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Analysis of field experiences of students concurrently enrolled in HUMSR 145A, or HUMSR 145B or HUMSR 145D. Class time is devoted to sharing, evaluation, and discussion of student’s supervised field experiences and placement. Continued development of clinical skills, theoretical integration, knowledge base, professional values, and competence in the helping profession. May be completed three times (A-F or P/NP). Lecture. Transfer: CSU

HUMSR 145A, 145B, 145D—COMMUNITY AGENCY PRACTICUM 1, 2, 4 Units
Formerly listed as “Community Agency Fieldwork”
Prerequisite: Satisfactory completion of HUMSR 110 or 111.
Concurrent Enrollment: HUMSR 145
Supervised field experience in a variety of community social agencies. Three maximum completions in any combination of HUMSR 145 A, B, and D. (A-F or P/NP). Applicable to the Associate Degree. Transfer: CSU

IIS (Individualized Instruction and Services)

IIS 13—IMPROVING LEARNING POTENTIAL 2 Units
Non-degree course.
Specialized computer-assisted instruction for students with disabilities to maximize their learning potential and increase academic efficiency. Four maximum completions. Lecture/Laboratory. (P/NP Only)

IIS 15—ADAPTED KEYBOARDING 2 Units
Non-degree course.
Designed to teach keyboarding basics to students with disabilities who must use assistive technologies for successful access to the keyboard or monitor and/or are unable to compete successfully in mainstream keyboarding courses. Four maximum completions. Lecture/Laboratory.

IIS 16—COMPUTER ACCESS 1 2 Units
Non-degree course.
Designed for students with visual, physical, acquired brain injury, language impairment, learning disabilities or deafness. Provides training in the use of computer access technologies which enhance a disabled student’s ability to access and use microcomputers. Four maximum completions. Lecture/Laboratory.

IIS 18—COMPUTER ACCESS PROJECTS 2 Units
Non-degree course.
Designed for students with disabilities who require access to specialized assistive technologies in order to complete assignments for other classes in which they are concurrently enrolled. (A-F or P/NP) Four maximum completions. Lecture/Laboratory.

IIS 20—MATH STRATEGIES FOR DISABLED STUDENTS 1 Unit
Non-degree course.
Intended for students with disabilities who need additional instruction and compensatory strategies that typically lead to success within the traditional classroom. Specialized instruction will occur in basic skills and in formulating efficient test-taking and study strategies specifically related to math. Four maximum completions. Lecture. (A-F or P/NP).

IIS 21—MAKING THE MOVE: TRANSITION TO COLLEGE 1 Unit
Non-degree course.
Intended for new and re-entry students with disabilities who need additional instruction and compensatory strategies to learn and be successful within the traditional classroom. Specialized instruction will occur in disability awareness and in formulating strategies for success in the college environment. Four maximum completions. Lecture.
INDIS (Interdisciplinary Studies)

The Interdisciplinary Studies Program emphasizes critical thinking, communication skills, and independent work. Students are accepted into the program not solely on the basis of past achievement but, most importantly, on their willingness to become members of an intellectually stimulating, interactive learning community.

INDIS 55—INTRODUCTION TO WOMEN'S STUDIES 3 Units
Interdisciplinary approach to the study of women and gender. Fundamental concepts in women's studies. Modules in social sciences, arts, humanities and natural sciences. Field trips may be required. Lecture. General Education: (MJC-GE: B, C)

INDIS 61—HOLLYWOOD TODAY 2 Units
A non-technical, non-transfer course for the consumer of popular contemporary films, emphasizing the central elements of film in the development of audience response. Lecture, viewing, discussion. Four maximum completions. Lecture. Fee to cover admission.

INDIS 100—INTRODUCTION TO HONORS SCHOLARSHIP 3 Units
Enrollment limited to those who have been admitted to the Honors program. Interpersonal communication theory and its practical application. Forms of philosophical inquiry that are applicable to the humanities, social sciences, arts, and physical sciences as well as their ethical and political applications. Library and information sources, including development of research strategies, and the retrieval, evaluation, and use of information. (A-F only) Transfer: CSU.

INDIS 105—INTRODUCTION TO WOMEN’S STUDIES 3 Units
Recommended for Success: Satisfactory completion of ENGL 50
Interdisciplinary approach to the study of women and gender. Introduction to the concepts, philosophies, and terminology of women's studies. Modules in social sciences, arts, humanities and natural sciences. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B,C), (CSU GE: D4), (IGETC: 4J)

INTDS (Interior Design)

Course content within the Interior Design program emphasizes the home and the workplace as the environment created by individuals in response to their family and work interests and needs. Focus is placed not only on the physical set-up of the structure and interior but also on the psychological and sociological effects of the environment on the people who function within it. Product knowledge is emphasized as students learn to keep up with what is in demand as lifestyles and tastes change.

INTDS 10 X, A,B—INTERIOR DESIGN OPEN LAB ½, 1, 2 Units
Corequisite: Concurrent enrollment in INTDS 100 or 120 or 130 or 140 or 145 or 150 or 155 or 160 or 170 or 180 or 190 or 200 or 201 or 202 or 203 or 204 or 205 or 206 or 210 or 215 or 220 or 230 or 235 or 240 or 245 or 250 or 255 or 260 or 265 or 270 or 290 or 295X or 298X or 299 or 349 or 373 or 375 or 398 or 399.
Open lab for the currently enrolled interior design student; concurrent enrollment with another interior design course required. Four completions allowed. Laboratory (P/NP Only).

INTDS 100—CAREERS IN DESIGN 2 Units
Introduction to educational and interior design employment opportunities. Includes portfolio and educational plan development and curriculum requirements that pertain to educational goals as they relate to interior design majors. Emphasizes personal, educational, and professional qualifications required for success in obtaining, maintaining, and advancing in the field of interior design and related professions. Field trips may be required. Lecture. (A-F or P/NP). Transfer: CSU.

INTDS 120—COLOR THEORY AND APPLICATION 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82 and ENGL 50 and MATH 20
Corequisite: Satisfactory completion of or concurrent enrollment in INTDS 200
Basic color theory and its application to the built environment. Development of skills and knowledge applicable to interior architecture, decorative arts, and related fields of design, such as product development. Exploration of the impact of cultural heritage, the effects of environment, and the psychological implications related to the application and use of color. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). Transfer: CSU

INTDS 130—FABRICS FOR INTERIORS 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete (READ 82 and MATH 20 and ENGL 50)

INTDS 140—RENDERING AND RAPID VISUALIZATION 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82 and ENGL 50 and MATH 20
Prerequisite: Satisfactory completion of INTDS 120, 200 and 230
Introduction to the principles and techniques used in interior illustration. Emphasis on drawing in perspective using light, shade, and shadow, and pencil rendering of furniture, interior finishes, and accessories. May be completed up to 2 times. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). (MJC Activities) Transfer: CSU.

INTDS 145—FUNDAMENTALS OF LIGHTING DESIGN 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82 and ENGL 50 and MATH 50
Prerequisite: Satisfactory completion of INTDS 235
Fundamentals of lighting design, theory, and application, including the history and vocabulary. Basic study of how light affects color and vision. Survey of lighting techniques, codes, and energy efficient practices for interior designers. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). Transfer: CSU.

INTDS 150—HISTORY OF INTERIORS/DECORATIVE ARTS 1 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 20 and READ 40.
Corequisite: Satisfactory completion of or concurrent enrollment in INTDS 200
Survey of historical relationship between interior architecture, culture, and the decorative arts. Overview of the development of style from Antiquity to the Classical Revival Period of the nineteenth century. Social, economic, technological influences, and innovations are emphasized. Field trips may be required. Lecture. (A-F or P/NP). Transfer: CSU, UC General Education: (CSU-GE: C1)

INTDS 155—HISTORY OF INTERIORS DECORATIVE ARTS 2 3 Units
Survey of the historical relationship between interior architecture, furniture, and decorative arts. Overview of styles from the Classical Revival period of the nineteenth century through the present time. Social, economic, technological influences and innovations are emphasized. Field trips may be required. Lecture. (A-F or P/NP). Transfer: CSU, UC General Education: (MJC-GE:2)
INTDS 160—ASIAN DESIGN AND DECORATIVE ARTS 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82, AND ENGL 50 AND MATH 20.

Broad survey of historic and contemporary Asian decorative arts, architecture, interiors, and landscape design. Introduction to the influence of trade, International exhibitions, and globalization on Western design and manufacturing, including the Asian-inspired works of Western architects and designers. Survey of Asian motifs, materials, colors schemes, and resources. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). Transfer: CSU

INTDS 180—BARRIER-FREE DESIGN, CODES & REGULATIONS 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82, AND ENGL 50, AND MATH 20.

Prerequisite: Satisfactory completion of INTDS 200 and INTDS 230.

Corequisite: Satisfactory completion of or concurrent enrollment in INTDS 215

Concepts of lifetime and barrier-free design. Related local, state, and federal regulations will be discussed. Americans with Disabilities Act (ADA), the principles of universal design and concepts of aging in place will be discussed. Field trips may be required. Preparation for the California Codes and Regulations Exam. (A-F or P/NP). Lecture/Laboratory. Transfer: CSU

INTDS 190—SUSTAINABLE AND GREEN DESIGN 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82 and MATH 20 and ENGL 50.

Overview of environmentally responsible design, building practices, systems, and materials with an emphasis on residential construction and interiors. Field trips may be required. (A-F or P/NP). Lecture. Transfer: CSU

INTDS 200—INTERIOR DESIGN FUNDAMENTALS 3 Units
Overview of interior design and furnishings. Study and application of principles of color and design, period influences, selection and arrangement of decorative materials, organized selection of furnishings and materials. Includes consumer and socioeconomic considerations. Field trips may be required. Lecture. Transfer: CSU

INTDS 210—INTRODUCTION TO SALES AND MARKETING FOR DESIGN

Introduction to sales psychology and the principles of marketing and business development for design. Increasing success in the workplace by building client relationships, understanding client needs and wants, and finding a niche. Focus on marketing methods, branding, ethics, selling design services, communication and presentation techniques, and effective use of technology. Field trips may be required. Lecture. (A-F or P/NP). Transfer: (CSU)

INTDS 215—INTERIOR DESIGN STUDIO 1 2 Units
Corequisite: Satisfactory completion of or concurrent enrollment in INTDS 200.

Designed to apply concepts and theories presented in the lecture course, INTDS 200, Fundamentals of Interior Design. Emphasizes the design process in developing solutions for design projects. Develops skills for using visual and oral communication tools for client presentations. Field trips may be required. A-F and P/NP. Applicable to the Associate Degree. Transfer to CSU. (CSU-GE - C). Lecture/Laboratory. Transfer: CSU

INTDS 220—INTERIOR FINISHES CONSTRUCTION MATERIALS 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 20, ENGL 50 and CMPSC 201, and READ 82

Prerequisite: Satisfactory completion of INTDS 200

Corequisite: Satisfactory completion of or concurrent enrollment in INTDS 215

Survey of interior finish materials and materials used in construction. Introduction to the industry, the influence of style and technology, the selection and specification issues related to specific categories of products. Lighting, flooring, paint and wall coverings, window treatments, plumbing fixtures and appliances, textiles, furnishings and various surface materials will be included. Lecture, small group activities, product research, and field trips. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). Transfer: CSU

INTDS 230—DRAFTING FOR INTERIORS 3 Units
Introduction to tools and techniques specific to drafting of interior spaces. Development of floor plans, sections, elevations, cabinetry and reflected ceiling plans relating to interior design. Incorporation of space planning, ADA guidelines, building codes, concepts of universal and lifetime design, and visual presentations. (A-F or P/NP) Field trips may be required. Lecture/Laboratory. Transfer: CSU

INTDS 235—RESIDENTIAL SPACE PLANNING 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82, AND ENGL 50, AND MATH 20.

Prerequisite: Satisfactory completion of INTDS 200, INTDS 215 AND INTDS 230

Applies the design process to residential interior design projects. Addresses programming, space planning, concept development and design implementation to design of social, work, and private living zones. Principles and elements of design are incorporated into structural and non-structural components of interior and exterior residential environments. Field trips may be required. Lecture/ Laboratory. (A-F or P/NP). Transfer: CSU

INTDS 245—KITCHEN AND BATH DESIGN 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete READ 82, AND ENGL 50, AND MATH 20.

Prerequisite: Satisfactory completion of INTDS 235.

Overview of the basic principles of kitchen and bath design and space layout, including drawing floor plans and elevations to scale. Selection and evaluation of current products and materials, are made based upon the survey of the client’s needs. Changes in cabinetry appliances, finish materials, barrier-free design, and changing family patterns, reflecting current materials, innovations, technology, and regulations are introduced. Field trips may be required. Lecture/Laboratory. (A-F or P/NP).

Transfer: CSU

INTDS 250—COMPUTER AIDED DRAFTING/ DESIGN FOR INTERIOR DESIGN
Prerequisite: Satisfactory completion of INTDS 200.

Overview and application of the basic skills and techniques of Computer Aided Drafting/Design (CADD) using designer-specific software. Floor plans, space planning, elevations and client needs are emphasized. Principles and elements of design as well as the ADA and NKBA guidelines will be applied to interior architecture, layout, lighting, finish materials & furnishings. Field trips may be required. Lecture/Laboratory. (A-F or P/NP). Transfer (CSU)

INTDS 270—BUSINESS AND PROFESSIONAL PRACTICES 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 10 or qualify through the MJC assessment process.

The business and professional management of an interior design practice, including legal issues, ethics, project programming and business practices. Introduction to field-specific software for management. Emphasis placed upon creating a business plan, developing contracts, choosing an appropriate business format, and licensing alternatives. Wholesale resource development procedures and introduction to professional examinations are included. Field trips may be required. Lecture. (A-F or P/NP). Transfer: CSU

INTEC (Industrial Technology)

Courses are intended for students interested in new career opportunities in the Manufacturing, Maintenance, Electrician, Home Building, Building and Safety Code Administration, Plant and Facilities and Production fields as well as those already working in the Industry who are interested in updating or upgrading their knowledge and skills.

INTEC 50—BASIC VOCATIONAL ENGLISH 2 Units

FOR INDUSTRIAL TECHNOLOGY

Formerly listed as INDED 50.

Reading, writing, speaking and vocabulary skill development specific to industrial technology. Designed for students who want to improve their basic language skills. For elective credit only, does not apply toward Industrial Technology major. Field trips may be required. Two maximum comple-
INTEC 225—PRINCIPLES OF ELECTRICAL WIRING
3 Units
Formerly listed as ELECT 225.
Also offered as AGM 225.
Fundamental principles, systems, and applications of electrical energy and the equipment necessary to manually or automatically control that energy. Field trips required. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

INTEC 226—MOTORS, CONTROLS AND CONTROLLERS
3 Units
Prerequisite: Satisfactory completion of ELTEC 211 and 208.
Formerly listed as INDED 226.
Also offered as ELTEC 226.
An introduction to AC and DC motors and the circuits which control them. Use and programming of variable frequency drive motor controllers. Lecture/Laboratory. Materials fee required. (A-F Only) Transfer: CSU

INTEC 229—COMMERCIAL AND INDUSTRIAL WIRING
3 Units
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete (INTEC 225 OR AGM 225) AND (INTEC 208 OR ELTEC 208). Also offered as INTEC 229.
Essential insights and practices in Commercial and Industrial Wiring that develop skills for the electrical trade. Topics include the application of basic concepts in the design of electrical systems, implementation of accepted trade practices used in installations, and common troubleshooting techniques. Field trips may be required. Materials fee required. (A-F Only) Transfer: CSU

INTEC 248—ELECTRICAL CODES AND ORDINANCES
3 Units
Formerly listed as INDED 393.
Interpretation and application of national, state and local codes and ordinances which regulate the installation and maintenance of electrical circuits and equipment. Four maximum completions. Lecture. (A-F Only) Transfer: CSU

INTEC 249—ANALYSIS OF ELECTRICAL CODES
3 Units
Prerequisite: Satisfactory completion of INTEC 248
Formerly listed as INDED 394.
Continuation of INTEC 248. Training in analysis of national, state and local codes and ordinances which regulate installation, alteration and maintenance of electrical circuits and equipment. Lecture. Three maximum completions. Materials fee required. (A-F Only) (Spring) Transfer: CSU

INTEC 261—INTRODUCTION TO PLANT MAINTENANCE
3 Units
Formerly listed as INDED 361.
Basic principles, methods of operation and maintenance procedures for equipment and systems of modern industrial and processing plants. Four maximum completions. Lecture. (A-F Only) Transfer: CSU

INTEC 262—HYDRAULICS/PNEUMATICS
3 Units
Formerly listed as INDED 362.
Also offered as AGM 262.
Principles and practices of hydraulics/pneumatics as used in the industry. Study of the different applications and management of hydraulics for the most efficient use. Basic pneumatic principles and application systems. Field trips may be required. Two maximum completions. Lecture. Transfer: CSU

INTEC 265—TROUBLESHOOTING TECHNIQUES
1 Unit
Also offered as ELTEC 265.
Common troubleshooting methodologies used in manufacturing today. One-solution and multiple-solution problems commonly found in everyday life through industrial processes. Prepares students to actively solve problems in personal and professional life. Lecture. Transfer: CSU

INTEC 300—SURVEY OF APPLIED TECHNOLOGIES
3 Units
Also offered as ELTEC 300.
Survey of applied technologies in the Advance Manufacturing, Transportation, or Construction Industry. Topics include electricity, small engines/industrial mechanics, common computer software and robotics. Field trips may be required. (A-F only) Lecture/Laboratory. Applicable to the associate degree.
INTEC 301 — EMPLOYABILITY SKILLS 1  
Also offered as FCS 301.
Development of basic background in non-technical skills (S.C.A.N.S.) that will increase a person'semployability in the Family and Consumer Sciences and Industrial Technology related occupations. Topics will include: Team Building, Safety, Time and Money Management. Field trips may be required. Lecture/Laboratory.

INTEC 302 — EMPLOYABILITY SKILLS 2  
Also offered as FCS 302.
Development of basic background in non-technical skills (S.C.A.N.S.) that will increase a person's employability in the Family and Consumer Sciences and Industrial Technology related occupations. Topics will include: Leadership, Safety, Industry Expectations. Field trips may be required. Lecture/Laboratory.

INTEC 303 — INTRODUCTION TO TEAMWORK DEVELOPMENT FOR INDUSTRY
Interdisciplinary approach to the study of team solutions to industrial problems. Introduction to team member selection criteria, development of team cohesiveness, team solutions to realistic industry problems, and use of computer software to solve and present team solutions. Modules in communications, computer application and industrial technology. Lecture.

INTEC 306 — INTRODUCTION TO OCCUPATIONAL SAFETY & HEALTH  
Formerly listed as HSAF 361.
Introduction to the principles and techniques of occupational safety and health. Lecture. (A-F Only)

INTEC 312 — BEARINGS  
1/2 Unit
A descriptive introduction to the common industrial bearing. Content includes basic terminology, operation and maintenance of journal bearings, ball and roller bearings, bearing seals, bearing lubrication, and bearing maintenance. Lecture.

INTEC 320 — ELECTRICAL SAFETY  
Also offered as ELTEC 320.

INTEC 340 — UNIFORM BUILDING CODE, STRUCTURAL  
Formerly listed as INDED 369.
Review of building plans for compliance with structural engineering requirements as per the Uniform Building Code. Four maximum completions. Lecture. (A-F Only)

INTEC 341 — UNIFORM BUILDING CODE, NON-STRUCTURAL  
Formerly listed as INDED 370.
Review of building plans for compliance with non-structural requirements such as occupancy types and life-safety requirements as per the Uniform Building Code. Four maximum completions. Lecture. (A-F Only)

INTEC 344 — UNIFORM MECHANICAL CODE  
Formerly listed as INDED 371.
Minimum code requirements for the installation of heating, ventilating, cooling, and refrigeration systems in residential and commercial applications. Four maximum completions. Lecture. (A-F Only)

INTEC 346 — ENFORCEMENT OF BUILDING REPAIR AND ABATEMENT REGULATIONS  
Formerly listed as INDED 374.
General review of housing regulations and their application to existing structures. Four maximum completions. Lecture. (A-F Only)

INTEC 350 — INDUSTRIAL TECHNOLOGY INTERNSHIP  
Prerequisite: Minimum of 15 units completed in Industrial Technology major. Supervised field experience in Industrial Technology. Study and research related to job training. Current technical developments in industry. Two maximum completions. Lecture. Field experience arranged. (P/NP Only) (Spring)

INTEC 352—INDUSTRIAL REFRIGERATION SYSTEMS  
Recommended for Success: Satisfactory completion of INTEC 391 credit. Lecture/Laboratory. (A-F Only)

INTEC 356 — HEATING VENTILATION, AIR CONDITIONING AND REFRIGERATION  
Formerly listed as INDED 356.
Principles of installation and maintenance of heating and cooling systems in residential and industrial facilities. Four maximum completions. Lecture/Laboratory. (A-F Only)

INTEC 367 — PLUMBING PRINCIPLES AND METHODS  
Formerly listed as INDED 367.
Principles of design, installation, and maintenance, and troubleshooting of residential and commercial pipe fitting and plumbing. Discussions and activities involve application of standard plumbing practice. Field trips may be required. Lecture/Laboratory. One completion. (A-F Only)

INTEC 376 — MECHANICAL BLUEPRINT READING  
Reading and interpreting basic two-dimensional mechanical drawings and sketches. Terminology, symbols, notes, and practices for manufacturing and fabrication trades. Field trips may be required. (A-F or P/NP). Applicable to the Associate Degree.

INTEC 379 — UNIFORM PLUMBING CODE  
Formerly listed as INDED 379.
Installation and inspection of plumbing in the construction of residential units. Content based upon current Uniform Plumbing Code. Lecture. Four maximum completions. (A-F Only)

INTEC 380 — ELEMENTARY CARPENTRY AND CONSTRUCTION  
Designed to provide entry-level skills for students wanting to explore and enter the construction trades. Experiences in developing carpentry, construction, planning and employability skills used in the residential and commercial construction industry. Field trips may be required. Materials fees required. Lecture/Laboratory. (A-F Only)

INTEC 390, 390A, B — ADVANCED MANUFACTURING TRAINING  
Advanced skills utilized in industry and needed by students working in the mechanical and automation areas of plant maintenance. Field trips may be required. Maximum of 10 units of INTEC 390 and INTEC 391 credit. Lecture. (A-F Only)

INTEC 391—ADVANCED MANUFACTURING TRAINING  
1½ Units
Advanced skills utilized in industry and needed by students working in the mechanical and automation areas of plant maintenance. Field trips may be required. Maximum of 10 units of INTEC 390 and INTEC 391 credit. Lecture. (A-F Only)

ITAL (Italian)

ITAL 51 — INTRODUCTION TO PRACTICAL ITALIAN 1  
3 Units
Introduction to the essentials of spoken and written Italian with emphasis on daily life situations, travel, and occupation. (A-F or P/NP) Field trips may be required. Lecture/Laboratory.

ITAL 52 — INTRODUCTION TO PRACTICAL ITALIAN 2  
3 Units
Recommended for Success: Satisfactory completion of ITAL 51. Continuation of ITAL 51. Review and expansion of essentials of spoken and written Italian. (A-F or P/NP) Field trips may be required. Lecture/Laboratory.

ITAL 101 — ITALIAN 1  
5 Units
JRNAL (Journalism)

JRNAL 100—REPORTING AND WRITING FOR THE MEDIA 3 Units
Prerequisite: Satisfactory completion of ENGL 10 or eligibility for ENGL 101.
Fundamentals of reporting and ideas and information for the print, broadcast, and “new” media, including research, writing, development of news judgment and ethical standards. Basic skill development in shaping news, feature, critical review, and opinion stories according to professional standards of accuracy, completeness and style, as well as essentials of newspaper design. Prepares students to work on campus newspaper, radio, television, and newspaper website and for higher education in these fields, recommended for students interested in any branch of the media, including Internet publications. Field trips may be required. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC (CC JRNAL 1)

JRNAL 120B, C—STUDENT NEWSPAPER PRODUCTION STAFF 2, 3 Units
Corequisite: JRNAL 100
Production of the campus newspaper, including writing, editing, advertising sales and layout, page design, and paste-up preparation for printing. Students desiring a limited participation in newspaper production, such as graphics or layout only, or limited writing only should sign up for this section. Field trips may be required. Four maximum completions but not to exceed 12 units: Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU (CC JRNAL 10)

JRNAL 146B, C—NEWSPAPER PHOTO STAFF 2, 3 Units
Limitation on enrollment: Satisfactory completion of ART 170 or equivalent camera and darkroom skills. Photo production for the college newspaper offering experience in taking photographs, printing, sizing, and designing photo essays. Student work is published regularly and can be used to build a portfolio. Some exposure to Photoshop. Field trips may be required. Three maximum completions not to exceed 6 units: Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU

JRNAL 179—PHOTOJOURNALISM 3 Units
Prerequisite: Satisfactory completion of ART 170
Also offered as ART 179
Study of photography as a tool in reporting news, sports and feature stories in print and online media. Examines work and approaches of professional photojournalists, develops fundamental skills in visual storytelling, camera, lighting and compositional techniques, editorial criteria, page layout, copyright and ethics. Photographs will be made with film and/or digital cameras and processed on computer. May be completed up to 2 times: (A-F or P/NP) (MJC Activities) Transfer: CSU

LR (Learning Resources)

Learning Resources offers a variety of courses that support the information competencies applicable to college-level research and lifelong learning. These courses are designed to benefit transfer students who want to develop research skills using the information resources and services found in college libraries, as well as lifelong learners seeking to acquire skills necessary to thrive in an information society. Learning Resources courses are transferable to four-year colleges and universities.

LR 100—RESEARCH METHODOLOGY 2 Units
Effective use of libraries and information sources, including development of research strategies, and the retrieval, evaluation, and use of information. Access a variety of print and electronic resources including online library catalogs, reference sources, online periodical and research databases, and the World Wide Web. Lecture. One completion allowed. (A-F or P/NP) Transfer: CSU

LR 120—LIBRARY RESEARCH ON THE INTERNET 1 Unit
Introduction to the Internet-based library resources, with an emphasis on the concepts and skills necessary for academic research. Analysis of advantages and limitations of web-based information; extensive practice on a variety of standard search tools, including online periodical and research databases, subject directories, search engines, and information portals; organization of online information; evaluating online information; and documentation of online information in APA and MLA formats. Lecture. (A-F or P/NP) Transfer: CSU

LR 140—INTRODUCTION TO ONLINE LEARNING 1 Unit
Practical and theoretical introduction to online courses, with special emphasis on online courses at Modesto Junior College. Students will discuss the rationale for web-based courses, as well as some of the difficulties inherent to the online medium. Students will also gain hands-on experience using WebCT, the course management program used for MJC’s online and hybrid classes. Lecture. Transfer: CSU

MACH (Machine Tool Technology)

The Machine Tool Technology program provides training toward the acquisition of proficiency in the use of metal removal and metal forming machine tools. Training in calculations of cutting speeds and feeds, use of measuring tools, study of elementary metallurgy, and making adjustments are also emphasized. Special focus is given to care of equipment, orderliness, accuracy, speed, judgment, confidence and safe working habits.

MACH 211D, E—MACHINE TOOL TECHNOLOGY 1 4, 5 Units
Prerequisite: Satisfactory completion of MATH 20 & ESL 45
Study and application of basic measuring tools, (steel rules, vernier calipers and micrometers), layout tools and hand tools. Emphasis in the theory and practice in the use of drilling machines, bandsaws and lathes. This course meets California apprenticeship standards. Intended for students with little or no experience in the manufacturing industry. Field trips may be required. Two maximum completions. Materials fee required. Lecture/Laboratory. (A-F Only) Transfer: CSU

MACH 212D, E—MACHINE TOOL TECHNOLOGY 2 4, 5 Units
Prerequisite: Satisfactory completion of (MACH 211D, or E) and MACH 301.
Principles and fundamental use of precision grinders and advanced applications of the manual engine lathe and milling. Advanced levels of measuring systems, study of basic metallurgy, and techniques of heat treating to enhance the properties of metallic parts. Meets California apprenticeship standards. Field trips may be required. Two maximum completions. Materials fee required. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU

MACH 213C, D—MACHINE TOOL TECHNOLOGY 3 3, 4 Units
Prerequisite: Satisfactory completion of (MACH 212D, or E) and MACH 302.
Theory and practice in the use of the dividing head, metric system, classes of fit, tool and cutter grinding, gear cutting, and dovetails. Carbide tools emphasized. Exploration and study of manufacturing processes found in use in local industries. Meets California apprenticeship standards. Field trips may be required. Two maximum completions. Materials fee required. Lecture/Laboratory. (A-F or P/NP) (Fall) Transfer: CSU

MACH 218—INTRODUCTION TO CNC LATHE PROGRAMMING 2 Units
Recommended for Success: Previous experience in the use of manual or CNC lathes. The use of manual programming techniques to develop tool path codes required to produce products using two axis CNC turning equipment. Effective cutting speeds, feeds, and depth of cut for various machining operations. The use of "canned cycles" with word address programming as well as conversational programming format will be addressed. May be completed up to 2 times. Field trips may be required. (A-F or P/NP). Materials fee required. Applicable to the Associate Degree. Transfer: CSU.
MACH 219—INTRODUCTION TO CNC MILL PROGRAMMING 2 Units
Recommended for Success: Previous experience in the use of manual or CNC lathes and milling machines. The previous courses and/or training must have been completed satisfactorily.

The use of manual programming techniques to develop tool path codes required to produce products using CNC milling and turning equipment. Effective cutting speeds, feeds, and depth of cut for various machining operations using "canned cycles" and word address programming format will be addressed. May be completed up to 2 times. Materials fee required. [A-F or P/NP] Applicable to the Associate Degree. Transfer: CSU

MACH 220—CNC MACHINE TOOL PROGRAMMING 2 Units
The use of manual and CAM (computer-aided manufacturing) programming techniques to develop tool path codes required to machine products using CNC milling and turning equipment. Four maximum completions. Materials fee required. [P/NP Only] Transfer: CSU

MACH 222—CNC MACHINE OPERATIONS 2 Units
Recommended for Success: Concurrent enrollment in MACH 219, 220, or 221 and previous machining experience.
The setup and operation of computer-controlled machine tools with emphasis on vertical machining centers and two axis turning centers. Primary controller operation, machine setup, tooling application, installation and adjustment and basic codes needed for editing will be addressed. Field trips may be required. Two maximum completions. Lecture/Laboratory/Other. Materials fee required. Transfer: CSU

MACH 223—ADVANCED CNC MACHINE OPERATIONS 3 Units
Prerequisite: Satisfactory completion of MACH 222.
Advanced setups, controller issues, and inspection techniques that may be encountered in the use of CNC controlled machine tools. May be completed up to 2 times. Field trips may be required. [A-F or P/NP] Materials fee required. Applicable to the Associate Degree. Transfer: CSU

MACH 301—MACHINE SHOP 1 3 Units
Study and application of basic measuring tools. (steel rulers, vernier calipers and micrometers), layout tools and hand tools. Theory and practice in the use of drilling machines, bandsaws, lathes and vertical milling machines. Meets California apprenticeship standards. Two maximum completions. Field trips may be required. Lecture/Laboratory. (A-F or P/NP) Materials fee required.

MACH 302—MACHINE SHOP 2 3 Units
Prerequisites: Satisfactory completion of MACH 211D, or E or MACH 301.
Principles and fundamentals in the use of the milling machine, bandsaw and surface grinder with emphasis on milling operations. Principles of metallurgy, heat treating, and the application of more advanced measuring techniques will be explored. Field trips may be required. Lecture/Laboratory. (A-F or P/NP) Three maximum completions. Materials fee required.

MACH 303—MACHINE SHOP 3 3 Units
Prerequisites: Satisfactory completion of MACH 212D, or E or MACH 302.
Theory and practice in the use of the dividing head, gearing systems, carbide tooling, and non-traditional machining systems. Field trips may be required. Lecture/Laboratory. Three maximum completions. (A-F or P/NP) Materials fee required.

MACH 310 — ADVANCED TOPICS IN MACHINING 1 Unit
Prerequisite: Previous machining experience or Satisfactory completion of MACH 211E OR MACH 301 OR MACH 221 OR MACH 222.
Overview of advanced tooling and machining practices. Topics may include electrical discharge machining, rapid prototyping, fixtures, cutting tool materials and geometry, die casting and plastic injection molding. Field trips may be required. Three maximum completions. Lecture/Laboratory. Materials fee required. [Summer] (P/NP Only)

MACH 311—CNC PROGRAMMING WITH MACROS 1 Unit
Prerequisite: Previous machining experience or Satisfactory completion of MACH 219 and previous CNC programming experience or on-the-job training. This is NOT an entry-level class.
The application and practice of using macros techniques in the development of programs for the operation of CNC machine tools. May be completed up to 2 times. Field trips may be required. Materials fee required. (P/NP Only).

MACH 312—4 AXIS MILL PROGRAMMING AND OPERATION 1 Unit
Prerequisite: Satisfactory completion of MACH 219.
The application and practice of programming, installing, and operating 4th axis rotary devices on CNC vertical machining centers. May be completed up to 2 times. Field trips may be required. Materials fee required. (P/NP Only)

MACH 313—MANUFACTURING PROCESSES 2 Units
The exploration and study of manufacturing techniques and common industrial processes found in local industries. Field trips may be required. Two maximum completions. Lecture.

MACH 315—3D PART PROGRAMMING FOR CNC MACHINES 1 Unit
Prerequisite: Satisfactory completion of MACH 220.
The application and practice of developing a program using CAD/CAM software that will direct a CNC machining center to cut a three dimensional contoured part. May be completed up to 2 times. Field trips may be required. Materials fee required. (P/NP Only).
Non-Transferable Math Courses (to CSU or UC)

MATH 10 — INTRODUCTION TO MATHEMATICS 4 Units
Recommended for success: Qualification by MJC math assessment process.
Module 1: A review of the four arithmetic operations as they apply to whole numbers, common fractions, and decimal fractions. Module 2: A variety of selected applications from arithmetic, pre-algebra, and geometry. Lecture. One completion allowed. Not applicable to the associate degree. (A-F or P/NP)

MATH 20 — PRE-ALGEBRA 5 Units
Prerequisite: Qualification by MJC math assessment process or satisfactory completion of MATH 10. Recommended for success: Placement into READ 82 or higher by MJC Assessment process.
Designed to help students prepare for algebra and applied math courses by reviewing fundamental operations of arithmetic and common geometric formulas, and introducing the algebraic concepts of simplifying expressions, polynomial arithmetic, and solving and graphing linear equations. Arithmetic review includes integers, decimals, ratios, and percents. Lecture. (A-F or P/NP)

MATH 50 — BUSINESS MATHEMATICS 3 Units
Prerequisite: Satisfactory completion of MATH 20 or qualification by MJC assessment process.
Mathematical background for business students: Problems of buying and selling, simple and compound interest, bank discounts, trade and cash discounts, installment payments, inventory markups, annuities, present value, commissions, taxes, payrolls, depreciation, and financial statements. Lecture.

MATH 70 — ELEMENTARY ALGEBRA 5 Units
Prerequisite: Satisfactory completion of MATH 20 or qualification by MJC math assessment process.
Recommended for Success: Eligibility for READ 82 or higher.
Equivalent to a first-year high school algebra course. Topics include: simplifying algebraic expressions, solving linear and quadratic equations, factoring, graphing lines and parabolas, solving systems of equations, rational expressions, and radicals, with application problems incorporated into each topic. (A-F or P/NP) Approved for on-line, hybrid, and telecourse instruction. (CC MATH 101)

MATH 71 — ELEMENTARY ALGEBRA 1 3 Units
Prerequisite: Satisfactory completion of MATH 20 or qualification by MJC math assessment process.
Recommended for Success: Eligibility for READ 82 or higher.
First half of MATH 70 — Elementary Algebra. Topics include: simplifying algebraic expressions, solving linear equations, graphing lines, and solving systems of linear equations and inequalities, with application problems incorporated into each topic. Lecture. (A-F or P/NP) (CC MATH 100A)

MATH 72 — ELEMENTARY ALGEBRA 2 3 Units
Prerequisite: Satisfactory completion of MATH 71.
Recommended for Success: Eligibility for READ 82 or higher.
Second half of MATH 70 — Elementary Algebra. Topics include: simplifying algebraic expressions, factoring, solving quadratic equations, graphing parabolas, rational expressions, and radicals, with application problems incorporated into each topic. Lecture. (A-F or P/NP) (CC MATH 100B)

MATH 80 — PLANE GEOMETRY 3 Units
Prerequisite: Satisfactory completion of MATH 70 or equivalent or qualification by MJC assessment process.
Theorems of plane geometry, proofs and the nature of a mathematical proof, numerical solution of geometric problems, and constructions using compass and straight edge. Lecture. (A-F or P/NP). General Education: (MJC-GE:D2)

MATH 88 — ALGEBRA WITH APPLICATIONS 3 Units
Prerequisite: Satisfactory completion of MATH 70 or (MATH 71 and MATH 72) or equivalent placement by the MJC assessment process.
Designed as an alternative to Math 90 for students pursuing an AA or AS degree and not intending to transfer. Topics include linear equations, linear inequalities, and applications; quadratic equations and applications; exponential equations and applications; solving systems of linear equations and applications; probability. (A-F or P/NP) Lecture. Not repeatable. General Education: (MJC-GE:D2)

MATH 90 — INTERMEDIATE ALGEBRA 5 Units
Prerequisite: Satisfactory completion of MATH 70 or (Math 71 and Math 72) or qualification by MJC math assessment process.
Recommended for Success: Eligibility for READ 184.
Equivalent to a second-year high school algebra course. Topics include: linear, quadratic, exponential, and logarithmic functions and equations; complex numbers; solving systems of linear equations in two and three variables using substitution, matrices, and determinants; conic sections; sequences, series, combinatorics; and probability. (A-F or P/NP). Approved for online, hybrid, and telecourse instruction. (CC MATH 104) General Education: (MJC-GE:D2)

General Education/Transfer & Liberal Studies

MATH 101 — MATHEMATICAL IDEAS AND APPLICATIONS 3 Units
Prerequisite: Satisfactory completion of MATH 90 or qualification by MJC assessment process.
A general education course emphasizing the role of mathematics in civilization, the nature of mathematical thought, and applications of mathematics. Lecture. Transfer: CSU, UC (CC MATH 6)
General Education: (MJC-GE:D2) (CSU-GE:B4) (IGETC:2)

MATH 105 — STRUCTURE OF MATHEMATICS 1 4 Units
Prerequisite: Satisfactory completion of MATH 90 or equivalent or qualification by MJC assessment process.
Structure of arithmetic for prospective elementary school teachers. The definitions, operations, and properties of sets, counting numbers, integers, rational and irrational numbers, numeral systems; number theory; and logic. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC (CC MATH 11A) General Education: (MJC-GE:D2) (CSU-GE:B4)

MATH 106 — STRUCTURE OF MATHEMATICS 2 4 Units
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC Assessment process.
Elementary probability, statistics and geometry for prospective elementary school teachers. Includes Euclidean geometry, measurement, and analytic geometry. Field trips may be required. (A-F or P/NP) Lecture/Laboratory. Transfer: CSU, UC (CC MATH 48) General Education: (MJC-GE:D2) (CSU-GE:B4)

MATH 111 — APPLIED COLLEGE ALGEBRA 3 Units
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process.
A College Algebra course that presents each topic to answer the question, “What is this used for?” Instruction begins with a real-world problem and develops the mathematical models and methods to solve it. Topics include: polynomial, rational, exponential, and logarithmic functions; theory of equations; systems of equations; matrix algebra; and analytic geometry. Designed specifically for students needing only a one-semester, non-precalculus College Algebra course for transfer to a university. Not open to students who have received credit in Math 121. Will not serve as a prerequisite to Math 122 or Math 171. Students preparing to take calculus must take MATH 121 and MATH 122. Lecture. Field trips are not required (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE:D2) (CSU-GE:B4) (IGETC:2A)

Pre-Calculus

MATH 121 — PRE-CALCULUS 1 5 Units
Prerequisites: Satisfactory completion of MATH 90 or qualification by MJC assessment process.
A one-semester College Algebra course or, together with Math 122, a two-semester Precalculus course sequence. Emphasis on algebra skills essential for success in calculus. Topics include: review of linear, quadratic, rational, radical, exponential and logarithmic equations; functions and graphs; synthetic division, complex roots of polynomials; the Fundamental Theorem of Algebra, applications of exponential and logarithmic equations; sequences and series; mathematical induction; combinatorics and probability. (A-F or P/NP) Lecture. Transfer: CSU, UC (CC MATH 17A) General Education: (MJC-GE:D2) (CSU-GE:B4) (IGETC:2)
MATH 174—INTRODUCTION TO LINEAR ALGEBRA 5 Units
Prerequisite: Satisfactory completion of MATH 173.

MATH 173—CALCULUS: THIRD COURSE 5 Units
Prerequisite: Satisfactory completion of MATH 172.
A continuation of MATH 172. The extension of calculus concepts to three dimensions and functions of multiple variables. Topics include: vectors and solids in 3-space, the calculus of vectors, partial differentiation and integration for business economics applications; partial derivatives. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC MATH 2) General Education: (MJC-GE: D2) (CSU-GE: B4) (IGETC: 2)

MATH 172—CALCULUS: SECOND COURSE 5 Units
Prerequisite: Satisfactory completion of MATH 171.
A continuation of MATH 171. Topics include: techniques of integration, applications of integration, introductory differential equations, differentiation and integration of parametric and polar equations, and infinite sequences and series. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC MATH 18A) (TCU MATH 210) (TCU MATH SEQ A) General Education: (MJC-GE: D2) (CSU-GE: B4) (IGETC: 2)

MATH 171—CALCULUS: FIRST COURSE 5 Units
Prerequisite: Satisfactory completion of MATH 121 and MATH 122 or qualification by MJC assessment process.
Fundamental foundations of differential and integral calculus. Topics include: limits, continuity, differentiation, curve sketching, applications of differentiation, integration, the Fundamental Theorem of Calculus, and applications of integration. (A-F or P/NP) Lecture. Transfer: CSU, UC (CC MATH 18B) (TCU MATH 180) (TCU MATH SEQ A) General Education: (MJC-GE: D2) (CSU-GE: B4) (IGETC: 2)

MDAST 320—INTRODUCTION TO MEDICAL ASSISTING 3 Units
Concurrent Enrollment: MDAST 321, 322, 323.
Orientation to the medical office and the role of the medical assistant. Professional relations and communications, ethics, and legal responsibilities; history of medicine, and community health facilities. Field trips may be required. Lecture. (A-F Only) (Fall)

MDAST 321—MEDICAL TERMINOLOGY 3 Units
Emphasizing logical and rational understanding of word parts. Covers medical terms organized according to body systems, including fundamental understanding of the basic anatomy, function, diseases and surgeries of each body system. Lecture. (A-F Only) Transfer: (CC OFFTEC 50)

MDAST 322—MEDICAL ASSISTING ADMINISTRATIVE PROCEDURES 3½ Units
Concurrent Enrollment: MDAST 320, 321, 322.
Medical assisting administrative procedures including financial record keeping, insurance claims, banking functions, payroll and medical records. Students receive training in completing the above procedures manually and by computer. Field trips may be required. Lecture/Laboratory. (A-F Only) (Fall)

MDAST 323—MEDICAL ASSISTING CLINICAL PROCEDURES 3 Units
Concurrent Enrollment: MDAST 320, 321, 322
Clinical medical assisting skills, which pertain to preparing the patient for examination and assisting patient and physician during patient examination and treatment. The assistant must anticipate the physician’s needs as to the type of examination, the specific equipment needed, and the extent of assistance required by the patient. This requires judgement based on a reasonable understanding of physical examination, the methods and equipment used, and the related role of the medical assistant. Lecture/Laboratory. Materials fee required (items for infection control/malpractice liability insurance). (A-F Only) (Fall)

MDAST 324—INTRODUCTION TO DISEASES AND PHARMACOLOGY 4 Units
Concurrent Enrollment: MDAST 325, 326
Medical terminology related to the human body in health and disease. Pathogenesis and discussion of representative diseases; signs and symptoms of many major diseases, and basic drugs used in treatment. Lecture. (A-F Only) (Spring)

MDAST 325—LABORATORY PROCEDURES 3 Units
Concurrent Enrollment: MDAST 324, 326
Introduction to laboratory procedures necessary to aid the physician. Includes patient preparation for diagnostic studies, purposes, techniques and recording of procedures commonly performed. Field trips may be required. Lecture/Laboratory. (A-F Only) (Spring)

MDAST 326—EXTERNSHIP 7 Units
Concurrent Enrollment: MDAST 324, 325
Externship portion of the program consists of two 8-week rotations in which students apply knowledge in performing administrative and clinical procedures. Students also receive training in medical office emergencies and seeking employment. Lecture/Laboratory. Materials fee required (items for infection control/malpractice liability insurance). (A-F Only)

MDAST 327—CLINICAL EXTERNSHIP 3½ Units
Prerequisite: Satisfactory completion of (MDAST 320 and MDAST 321 and MDAST 322 and MDAST 323)
Clinical Externship portion of the program consists of 184 clinical hours in which students apply knowledge in performing administrative and clinical procedures. Students also receive training in medical office emergencies and seeking employment. (A-F Only). Materials fee required.
**MDAST 350—MEDICAL TRANSCRIPTION** 3 Units
Recommended for Success: Satisfactory completion of MDAST 321, OFADM 203 or equivalent.
 Entry-level course to prepare students to take the Medical Transcriptionist Certification Exam offered by the American Association for Medical Transcription (AAMT) to qualify as a Certified Medical Transcriptionist (CMT). Covers use of computers to transcribe physician dictation including progress notes, letters, consultations, procedures, and radiology reports heard through the earphones of a transcribing machine. Two maximum completions. Lecture. Materials fee required. Transcribing machine, earphones and supplies required.

**MDAST 352—MEDICAL CODING/CPT** 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MDAST 121.
 Entry-level course that covers the use of Current Procedural Terminology (CPT), a coding system developed by the American Medical Association (AMA) to convert widely accepted, uniform descriptions of medical, surgical, and diagnostic services rendered by health care providers into five-digit numeric codes. This course along with Medical Assisting 353 prepares students to take the Certified Coding Specialist Examination offered by the American Health Information Management Association (AHIMA). Two maximum completions. (A-F or P/NP). Lecture.

**MDAST 353—MEDICAL CODING/ICD** 3 Units
Recommended for Success: Satisfactory completion of MDAST 321 or equivalent.
Formerly listed as MDAST 352: Medical Coding Specialist.
 Entry-level course that covers the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) which is designed for the classification of patient morbidity (sickness) and mortality (death) information for statistical purposes and for the indexing of hospital records by disease and operation for data storage and retrieval. This course along with Medical Assisting 353 prepares students to take the Certified Coding Specialist Examination offered by the American Health Information Management Association (AHIMA). Two maximum completions. Lecture. (A-F or P/NP). Two completions allowed.

**MDAST 354—INTERMEDIATE MEDICAL CODING/ICD9CM** 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MDAST 321, MDAST 353, and MDAST 352.
 Continued development in various settings where ICD-9-CM is used, such as specialties, physician offices, medical group practices, medical clinics, billing companies and hospitals. Fundamental skills include ICD-9-CM coding, guidelines/conventions, use of the ICD-9-CM manual, and numerous coding exercises (including excerpts from actual patient records). (A-F or P/NP). Field trips may be required. Lecture.

**METEO 161—INTRODUCTION TO METEOROLOGY** 4 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete (MATH 70 or PHYS 160) and (EASCI 161)
 Introduction to atmospheric structure, weather monitoring techniques, solar radiation, thermodynamics, air pressure, humidity, cloud formation, wind patterns, planetary circulation patterns, storms, and severe weather (including thunderstorms, tornadoes, and hurricanes), and the causes and consequences of climate and climate change. Lab activities emphasize gathering and analysis of meteorological data (both archived and real time) to understand and predict weather events. Lecture/Laboratory. Field trips may be required. (A-F or P/NP). Transfer: CSU General Education: (MIC-GE:A) (CSU-GE: B1, B3) (IGETC:5A)

**METEO 171,A,B,C—METEOROLOGY FIELD STUDIES** ½, 1, 2, 3 Units
Prerequisite: Satisfactory completion of or concurrent enrollment in METEO 160.
 Field trips to areas of meteorological interest. Emphasis on the weather, climate, and meteorological significance of the regions visited. May be repeated to six maximum units. Lecture/Laboratory. Materials fee may be required. Transfer: CSU, UC (For UC only: must be taken for 3 units.)

**MICRO** (Microbiology)

**MICRO 101—MICROBIOLOGY** 4 Units
Prerequisite: Satisfactory completion of (BIO 111 or 101 or AP Biology score of 4 or 5) and (CHEM 143 or AP Chemistry Score of 4 or 5). For information on AP scores and requisites, see “Prerequisite Challenge Process.”
 Includes the study of microbial metabolism, genetics, and varieties; immunity, infection, and antimicrobials. Intended for students entering the health professions. Field trips may be required. Lecture/Laboratory. Materials fee required. Transfer: CSU, UC (CC BIOL 65) General Education: (MIC-GE: A) (CSU-GE: B2,B3) (IGETC: SB)

**METEO** (Meteorology)

**METEO 151—INTRODUCTION TO METEOROLOGY LABORATORY** 1 Unit
Prerequisite: Satisfactory completion of or concurrent enrollment in METEO 160.
 Practical experience using meteorological charts and instruments, techniques in surface observations, weather map analysis and weather forecasting. Field trips required. Laboratory. Materials fee may be required. Transfer: CSU, UC General Education: (CSU-GE: B3) (IGETC: 5A)

**METEO 160—INTRODUCTION TO WEATHER AND CLIMATE** 3 Units
Introduction to weather and climate with emphasis on topics such as air pollution, clouds, precipitation, fog, storms, weather forecasting, the greenhouse effect, ozone depletion, and global warming. Field trips may be required. Lecture. Materials fee may be required. Transfer: CSU, UC (CC ESC 62) General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: 5A)
MUSIC (Music: Applied)

See “Repeat Limitations on Music Courses.” Students must meet performance and repertoire standards before proceeding to successive levels in the following classes.

MUSA 121—ELEMENTARY PIANO 1 Unit
(Formerly listed as MUSIC 120)
Essentials of music reading; fundamentals of rhythm, tone production and phrasing; introduction of scales and chords; methods of practice and memorization. Completion of MUSA 121 is recommended for all general elementary teaching candidates. Electronic piano lab and practice rooms available. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC (CC MUSIC 31A)

MUSA 122—PIANO ENRICHMENT 1 Unit
(Formerly listed as MUSIC 121)
Recommended for Success: Satisfactory completion of MUSA 121 or equivalent. Designed for the continuation of development of coordination, understanding of rhythmic skills, technique and theory. Emphasis upon sight reading and ensemble playing. Electronic piano lab and practice rooms available. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

MUSA 123—INTERMEDIATE PIANO 1 Unit
(Formerly listed as MUSIC 122)
Recommended for Success: Satisfactory completion of MUSA 122 or equivalent. Fundamental techniques of piano playing; review of scales and basic keyboard harmony; means of increasing skill in sight reading, musical interpretation of the score, memorization and playing by ear; introduction to repertoire from various stylistic periods; emphasis on the essentials of advanced piano study; analysis of the pianistic problems involved in selected repertoire from various stylistic periods; participation in student recitals. Four maximum completions. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC (CC MUSIC 41A, 41B)

MUSA 124—ADVANCED PIANO 1 Unit
(Formerly listed as MUSIC 123)
Recommended for Success: Satisfactory completion of MUSA 123 or equivalent. Study of advanced techniques of piano playing; review of scales and arpeggios; study of repertoire from various stylistic periods. Emphasis on preparation of solo repertoire for recital performance. Four maximum completions. Lecture/Laboratory. Transfer: CSU, UC

MUSA 131—ORGAN 1 1 Unit
(Formerly listed as MUSIC 124)
Recommended for Success: Satisfactory completion of MUSA 121 or equivalent. History construction and literature for the organ; use of foot pedals, coordination of hands and feet, and comparison of popular and classical styles; development of repertoire. Four maximum completions. Lecture/Laboratory. Not offered every semester. (MJC Activities) Transfer: CSU, UC
MUSA 132—ORGAN 2  
(Formerly listed as MUSIC 125)  
1 Unit  
Prerequisite: Satisfactory completion of MUSA 131 or equivalent  
Limitation on enrollment: Ability to coordinate keyboard manuals and pedals together using basic rhythms, melodic, and chordal structures.  
Development of skills introduced in MUSA 131, analysis of practice methods to overcome technical problems. Discussion of service playing and music suitable for various forms of worship. Preparation for recitals. Four maximum completions. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC

MUSA 133—ORGAN 3  
(Formerly listed as MUSIC 126)  
1 Unit  
Prerequisite: Satisfactory completion of MUSA 132 or equivalent  
Limitation on enrollment: Ability to coordinate keyboard manuals and together using basic rhythms, melodic, and chordal structures.  
Study and analysis of organ literature from baroque, classical, romantic and contemporary periods; function of the organ in solo and accompanimental forms; opportunity for practical experience in both areas; emphasis on cumulative repertoire. Four maximum completions. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC

MUSA 135—ELEMENTARY HARPSICHORD  
(Formerly listed as MUSIC 181)  
1 Unit  
Recommended for Success: Satisfactory completion of MUSA 121  
Introduction to the basic skills of harpsichord performance. Literature from the Renaissance, Baroque and Early Classical periods. Performance techniques will include figured bass, vocal and instrumental accompanying. Field trips may be required. Four maximum completions. Lab/studio activity/individualized instruction. (Fall) (MJC Activities) Transfer: CSU, UC

MUSA 141—ELEMENTARY GUITAR  
(Formerly listed as MUSIC 163)  
1 Unit  
Recommended for Success: Satisfactory completion of MUSA 101  
Examination of the basic elements of classical guitar technique and repertoire. Technical works will emphasize posture, correct right- and left-hand technique, as well as treble clef note-reading in first position. The course will introduce sight-reading on easy melodies as well as chord charts. Chord coverage will include: closed finger chords, open finger chords, and bar chords. The student is responsible for providing a nylon-stringed guitar, a guitar tuner, and a foot stool. All students will perform in a semi-formal performance at the end of the semester. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC (CC MUSIC 49)

MUSA 142—GUITAR ENRICHMENT  
(Formerly listed as MUSIC 164)  
1 Unit  
Prerequisite: Satisfactory completion of MUSA 141  
Improvement of guitarists' accompaniment technique, analytical skills, and performance competence. Music education majors are strongly encouraged to enroll. Special attention will be given to chord chart sight reading, contrapuntal reading, and principles of bass clef reading (continuo). Technical work will include all the major and minor diatonic scales, selected etudes emphasizing position shifts, arpeggiation and solo passage works. Students will be required to participate in a formal recital at the end of the term. Lecture/Laboratory. Field trips required. Four maximum completions. Transfer: CSU, UC

MUSA 143—GUITAR ADVANCEMENT  
(Formerly listed as MUSIC 174)  
2 Units  
Prerequisite: Satisfactory completion of MUSA 142  
Designed to fill the gap between MUSA 142 and MUSA 144. Elements of intermediate level technique and repertoire in both class and one-on-one sessions. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

MUSA 144—INTERMEDIATE GUITAR  
(Formerly listed as MUSIC 165)  
1 Unit  
Prerequisite: Satisfactory completion of MUSA 142  
Continuation of MUSA 142. Expanding on topics already covered. Emphasis given to sight-reading both on treble and bass clefs. Students are required to play all diatonic major and minor scales, as well as selected Sor Etudes. At the end of the term, students will perform a solo jury, which will consist of a technical work and contrasting works from the Renaissance, Baroque, Classical and Contemporary eras. Interdisciplinary ensemble performance is desired for this class. Students will be required to participate in a formal recital at the end of the term. Field trips required. Lecture/Laboratory. Field trips required. Four maximum completions. Transfer: CSU, UC

MUSA 145—APPLIED CLASSICAL GUITAR  
(Formerly listed as MUSIC 166)  
1 Unit  
Prerequisite: Satisfactory completion of MUSA144  
Designed for performance majors intending to transfer to four-year institutions. The curricula will cover materials necessary to provide the appropriate skill level for upper division coursework at most universities. Students must perform a thirty-minute recital as a completion requirement for the course. A fifteen-minute jury may substitute for the recital requirement. Field trips required. Lecture/Laboratory. Four maximum completions. (MJC Activities) Transfer: CSU, UC (CC MUSIC 50)

MUSA 151—ELEMENTARY VOICE 1  
(Formerly listed as MUSIC 131 Elementary Voice)  
1 Unit  
Development of the singing voice through consideration and application of the basic elements of tone production, i.e., breathing, resonance, diction, posture; principles applied through group and individual vocal exercises and singing. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

MUSA 152—ELEMENTARY VOICE 2  
Recommended for Success: Previous vocal experience.  
(Formerly listed as MUSIC 132 and titled "Voice Enrichment")  
1 Unit  
Further development of the singing voice through consideration and application of the basic elements of tone production, i.e., breathing, resonance, diction, posture; principles applied through group and individual vocal exercises and singing. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

MUSA 153—APPLIED VOCAL REPertoire 1  
(Formerly listed as MUSIC 133 and titled "Intermediate Voice")  
1 Unit  
Concurrent Enrollment required in MUSA 155  
Limitation on enrollment: Basic ability to sight read music and sing within the tonal center.  
Study and performance of vocal solo literature with emphasis on building repertoire; development of style, and preparation for recitals. Recital and public performance participation required. Intended for voice majors. Four maximum completions. Lecture/Rehearsal. Transfer: CSU, UC (CC MUSIC 39)

MUSA 154—APPLIED VOCAL REPertoire 2  
(Formerly listed as MUSIC 134—Applied Vocal Repertoire 2)  
1 Unit  
Formerly listed as "MUSIC 134 - Advanced Voice"  
Recommended for Success: Satisfactory completion of MUSA 153  
Concurrent enrollment in: MUSA 155  
Limitation on enrollment: Intermediate ability to sight read music and sing within the tonal center.  
Continuation of MUSA 153 with greater emphasis on building repertoire, development of style, and preparation for recitals. Recital and public performance participation required. Intended for voice majors. Four maximum completions. Lecture/Rehearsal. (A-F or P/NP) Transfer: CSU, UC (CC MUSIC 56)

MUSA 155—VOcal Master Class  
(Formerly listed as MUSIC 139)  
1 Unit  
Concurrent enrollment required: MUSA 151, MUSA 152, MUSA 153, or MUSA 154.  
Development of vocal performance through consideration and application of good vocal technique, performance practice, and dramatic character development; principles applied through solo, duet, or ensemble performances in class and public recitals. Lecture/Laboratory. Transfer: CSU

MUSA 161—ELEMENTARY STRINGS  
(Formerly listed as MUSIC 127)  
1 Unit  
Introduction to the playing of orchestra stringed instruments (violin, viola, cello, bass). Designed for students with no previous instrumental music experience, students who wish to review fundamentals of instrumental music, and experienced instrumentalists who wish to learn a secondary instrument. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

Transfer:
CSU, UC

Transfer:
CSU, UC
MUSC 112—RECORDING ARTS 2  
(Formerly listed as MUSC 178)  
Also offered as RATV 178  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSC 112  
Advanced topics in the recording studio relating to the digital recording process. In-depth study of microphone choice and placement, microphone pre-amplifiers and analog processors, direct inputs, non-destructive digital editing, software plugins, automation techniques, mixing and mastering in the recording process. Laboratory time required. Materials fee required. Four completions allowed. Transfer: CSU (MJC Activities)

MUSC 121—INTRODUCTION TO THE SYNTHESIZER AND MIDI  
(Formerly listed as MUSC 170)  
Introduction to synthesizer and electronic keyboard sound design and operational procedures. MIDI (Musical Instrument Digital Interface) music studio techniques will be examined and utilized in an electronic music studio environment. Music acoustics, electronic music composition, synthesizer live performance, digital sampling, audio recording and music software programs will be explored. (A-F or P/NP) Four completions allowed. (MJC Activities) Transfer: CSU

MUSC 122—ELECTRONIC MUSIC 2  
(Formerly listed as MUSC 171)  
Recommended for Success: Satisfactory completion of MUSC121or previous synthesizer/tape recording and MIDI music studio experience.  
Applied topics in electronic music composition, MIDI (Musical Instrument Digital Interface) music studio procedures, sampling, tape and digital recording. Performance in an electronic music concert is expected. Field trips may be required. Four maximum completions. Laboratory (A-F or P/NP) (MJC Activities) Transfer: CSU

MUSC 126—MUSIC PRODUCTION FOR MULTIMEDIA  
(Formerly listed as MUSC 168)  
Also offered as RATV 168  
Designed for the student with an interest in music composing, music production, sound design and sound effects. The course will explore production of music for recording artists, music videos, demos, public service announcements, radio programs, graphics animations, commercials, jingles, and TV/film scoring through the use of MIDI sequencing, digital multitrack recording and SMPTE synchronizing. Four completions allowed. (MJC Activities) (A-F or P/NP) Transfer: CSU

MUSC 123—ELECTRONIC MUSIC 3  
(Formerly listed as MUSC 172)  
Recommended for Success: Satisfactory completion of MUSC121 or previous synthesizer/tape recording and MIDI music studio experience.  
Advanced topics in electronic music composition, MIDI (Musical Instrument Digital Interface) music studio procedures, digital music signal processing, sampling, tape and digital recording, live performance, digital sampling, audio recording and music software programs will be explored. (A-F or P/NP) Four completions allowed. (MJC Activities) Transfer: CSU

MUSC (Music: Commercial)  
See “Repeat Limitations on Music Courses.” Students must meet performance and repertoire standards before proceeding to successive levels in the following classes.

MUSC 111—RECORDING ARTS 1  
(Formerly listed as MUSC 172)  
Also offered as RATV 172  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSC 121 and MUSC 122  
Introduction to the terminology and practices of the recording arts. Properties of sound, microphone placement, multi-track recording, mixing and mastering. Lab time and materials fees will be required. Two completions allowed. Field trips may be required. (A-F or P/NP) (MJC Activities) Transfer: CSU

MUSE (Music: Ensemble)  
See “Repeat Limitations on Music Courses.” Students must meet performance and repertoire standards before proceeding to successive levels in the following classes.

MUSE 145—GUITAR ORCHESTRA  
(Formerly listed as MUSC 173)  
Prerequisite: Satisfactory completion of MUSA 141. Enrollment limited to those with some sight-reading ability.  
Concurrent Enrollment: MUSA 142  
The Modesto Junior College Guitar Orchestra will focus on international classical and folkloric guitar ensemble repertoire. Students will be exposed to a large and multicultural repertoire for large guitar groups. This is a performance class, and students are required to perform in different venues representing the college’s guitar department. Two recitals will be required. Field trips required. Four maximum completions. Laboratory/Rehearsal. (MJC Activities) Transfer: CSU

MUSE 151—MASTERWORKS CHORUS  
(Formerly listed as MUSC 154)  
Previous experience in a large choral ensemble.  
A choral ensemble for all levels of singers. Study and performance of either one large-scale work or program of shorter choral works, drawn from the standard repertoire of classical, folk, and popular music. Public performances required. Four completions allowed. Laboratory. (MJC Activities) Transfer: CSU, UC (CC MUSIC 52)
MUSE 155—CONCERT CHOIR  
(Formerly listed as MUSIC 152)  
1 Unit  
Limitation on enrollment: Ability to match pitch, sing melodies in tune, and sight read elementary-level passages will be evaluated in audition.  
A large choral ensemble for intermediate and advanced level singers. Public performances of multi-cultural programs from a variety of historical periods. Field trips required. Four maximum completions. Rehearsal/Other. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

MUSE 156—CHAMBER CHOIR  
(Formerly listed as MUSIC 153 - Singers)  
1 Unit  
Prerequisite: Satisfactory completion of audition.  
A small choral ensemble for advanced singers. Public performances of historically and culturally varied music. Field trips required. Four maximum completions. Rehearsal/Other. (MJC Activities) Transfer: CSU, UC (CC MUSIC 69)

MUSE 161—COMMUNITY ORCHESTRA  
(Formerly listed as MUSIC 162)  
1 Unit  
Recommended for Success: Previous experience in instrumental music course or equivalent.  
Rehearsal and public performance of orchestral music from all eras and a variety of cultures. Field trips may be required. Four maximum completions. (MJC Activities) Transfer: CSU, UC (CC MUSIC 76)

MUSE 165—STRING ORCHESTRA  
(Formerly listed as MUSIC 150)  
2 Units  
Recommended for Success: Concurrent Enrollment in MUSE 165 or MUSE 161  
Limitation on Enrollment: Previous experience in instrumental music.  
Rehearsal and public performance of orchestral music for strings (from all eras and a variety of cultures). Focus on developing bowing and left hand technique. Four maximum completions up to 8 units. Field trips may be required. (A-F or P/NP) (MJC Activities) Transfer: CSU

MUSE 166—CHAMBER MUSIC ENSEMBLES (STRINGS)  
(Formerly listed as MUSIC 151)  
1 Unit  
Recommended for Success: Concurrent Enrollment in MUSE 165 or MUSE 161  
Limitation on Enrollment: Previous experience in instrumental music.  
Rehearsal and performance of chamber ensemble literature. Ensemble may be made up of varying numbers of string instruments. Recital and public performance required. Field trips may be required. Four maximum completions. Rehearsal/Other. (MJC Activities) Transfer: CSU, UC (CC MUSIC 78)

MUSE 171—CONCERT BAND  
(Formerly listed as MUSIC 161)  
1 Unit  
Limitation on enrollment: Previous experience in instrumental music or Satisfactory completion of MUSA 171 or MUSA 181.  
Rehearsal and performance of original wind literature and transcriptions for concert band. Student must own or have access to appropriate instrument. Field trips required. Four maximum completions. (A-F or P/NP) Rehearsal/Laboratory. (MJC Activities) Transfer: CSU, UC

MUSE 175—SYMPHONIC BAND  
(Formerly listed as MUSIC 146)  
2 Units  
Rehearsal and performance of original wind literature and transcriptions for band. Field trips may be required. Student must own or have access to an appropriate instrument. Four maximum completions. Lecture/Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

MUSE 176—CHAMBER ENSEMBLES (Band Instruments)  
(Formerly listed as MUSIC 145)  
1 Unit  
Concurrent Enrollment: MUSE 175 or MUSE 171.  
Rehearsal and performance of chamber ensemble literature. Ensembles may be made up of varying numbers of woodwind, brass, and percussion instruments. Recital and public participation required. Student must own or have access to an appropriate instrument. Field trips may be required. Four maximum completions. Rehearsal. (A-F or P/NP) Transfer: CSU, UC (MJC Activities) (CC MUSIC 78)

MUSE 181—JAZZ BAND  
(Formerly listed as MUSIC 149)  
2 Units  
Prerequisite: Previous experience in instrumental music and/or jazz ensembles.  
Study and performance of jazz literature in both traditional and contemporary styles. Field trips may be required. Four maximum completions. (MJC Activities) Transfer: CSU, UC (CC MUSIC 72)

MUSE 185—EVENING JAZZ BAND  
(Formerly listed as MUSIC 147)  
1 Unit  
Limitation on Enrollment: Student must have previous experience playing jazz ensemble music.  
Study and performance of jazz literature in both traditional and contemporary styles. Field trips may be required. Four maximum completions. Rehearsal. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC (CC MUSIC 72)

MUSE 186—PEP BAND  
(Formerly listed as MUSIC 148)  
1 Unit  
Preparation of music for sports events, rallies and other student body activities. Participation in concerts, rallies, and football games required; sectional rehearsals and additional rehearsal time required if needed. Field trips required. Four maximum completions. Lecture/Other. Not offered every semester. (MJC Activities) Transfer: CSU, UC

MUSE 181—JAZZ BAND  
(Formerly listed as MUSIC 149)  
2 Units  
Prerequisite: Previous experience in instrumental music and/or jazz ensembles.  
Study and performance of jazz literature in both traditional and contemporary styles. Field trips may be required. Four maximum completions. (MJC Activities) Transfer: CSU, UC (CC MUSIC 72)

MUSE 185—EVENING JAZZ BAND  
(Formerly listed as MUSIC 147)  
1 Unit  
Limitation on Enrollment: Student must have previous experience playing jazz ensemble music.  
Study and performance of jazz literature in both traditional and contemporary styles. Field trips may be required. Four maximum completions. Rehearsal. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC (CC MUSIC 72)

MUSE 186—PEP BAND  
(Formerly listed as MUSIC 148)  
1 Unit  
Preparation of music for sports events, rallies and other student body activities. Participation in concerts, rallies, and football games required; sectional rehearsals and additional rehearsal time required if needed. Field trips required. Four maximum completions. Lecture/Other. Not offered every semester. (MJC Activities) Transfer: CSU, UC

MUSE 191—CONDUCTING 1  
(Formerly listed as MUSIC 114)  
1 Unit  
Prerequisites: Satisfactory completion of MUST 101 MUST 102 or eligibility for MUST 121 via Music placement test.  
The study of style and technique of conducting. Emphasis on gestures and score analysis. Field trips may be required. Lecture. (Spring) Transfer: CSU, UC

MUSE 192—CONDUCTING 2  
(Formerly listed as MUSIC 115)  
1 Unit  
Prerequisite: Satisfactory completion of MUSE 191  
Continuation of MUSE 191 with special emphasis on applied aspects of conducting. Field trips may be required. Lecture. (Spring) Transfer: CSU, UC

MUSE 851—MASTERWORKS CHORUS  
(Formerly listed as OLDAD 854—MASTERWORKS CHORUS)  
Study and performance of either one large-scale work or program of shorter works. Public performance required. Not a graded course. Lecture/Laboratory.

MUSE 861—COMMUNITY ORCHESTRA  
(Formerly listed as OLDAD 862—COMMUNITY ORCHESTRA)  
Study and performance of a combination of large-scale and shorter works for orchestra. Public performance required. Field trips may be required. Laboratory/Rehearsal. Unlimited repeats. Not a graded course.

MUSE 871—CONCERT BAND  
(Formerly listed as OLDAD 871—CONCERT BAND)  
Prerequisite: Previous experience in instrumental music or Satisfactory completion of MUSA 171 or 160.  
Rehearsal and performance of original wind literature and transcriptions for concert band. Field trips may be required. Laboratory/Rehearsal. Not a graded course.
**MUSG (Music: General)**

**MUSG 101—MUSIC APPRECIATION** 3 Units  
(Formerly listed as MUSIC 110)  
Survey course emphasizing the development of the listener’s perception of the basic elements of music. Illustrations encompass various types of folk and traditional music, traditional classical music from a variety of historical periods, and musical material of a contemporary nature. Lecture. Field trips may be required. One completion allowed. (A-F or P/NP)  
Transfer: CSU, UC  
General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

**MUSG 102—INTRODUCTION TO WORLD MUSIC** 3 Units  
(Formerly listed as MUSIC 169)  
Exploration of traditional/contemporary folk music of Africa, Asia, Latin America, Europe and the U.S. from the perspective of music as culture. Investigations of the impact/influence of migratory patterns, social-political processes, and how ethnicities are formed in relation to music. Field trips are required. Lecture. Transfer: CSU, UC  
General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

**MUSG 111—INTRODUCTION TO AMERICAN POPULAR MUSIC** 3 Units  
(Formerly listed as MUSIC 118)  
Survey course emphasizing the listeners perception and understanding of the elements of American Popular music. Illustrations will cover folk, jazz, musical theatre, and rock styles of popular art music. Field trips may be required. Lecture. Transfer: CSU, UC  
General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

**MUSG 112—THE MUSIC OF THE BEATLES** 3 Units  
(Formerly listed as MUSIC 190)  
A survey of the musical styles by the Beatles dating from 1958-1970. Emphasis will be placed on identifying the various musical periods, the stylistic practices in their compositions, their performances and interviews. Lecture. (A-F Only)  
Transfer: CSU, UC

**MUSG 121—HISTORY OF WESTERN MUSIC 1** 3 Unit  
(Formerly listed as MUSIC 112)  
Survey of musical styles by master composers dating from the ancient period through the end of the baroque period (1750). Various historical periods, the stylistic practices in composition and performance, musical compositions of the most prominent composers from each historical period. Field trips may be required. Lecture/Laboratory. (A-F or P/NP)  
Transfer: CSU, UC  
General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

**MUSG 122—HISTORY OF WESTERN MUSIC 2** 3 Units  
(Formerly listed as MUSIC 113)  
A general survey of the musical styles by master composers dating from the classical period (1750) to the present. Emphasis will be placed on identifying the various historical periods, the stylistic practices in composition and performance, utilizing the musical compositions of the most prominent composers from each historical period. Field trips may be required. One completion allowed. Lecture/Laboratory. Transfer: CSU, UC  
General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

**MUSI (Music: Independent Activities)**

**MUSI 349 A-D—WORK EXPERIENCE IN THE ARTS —** 1 Unit  
SUPERVISED PRACTICE  
(Formerly listed as MUSIC 349A)  
Designed for those majors who wish to combine classroom experience with an expansion of skills or knowledge acquired at a site of employment on a paid or volunteer basis. Work must directly relate to the student's area of study. May be repeated for a total of 16 units. Also offered during May, June, and July. Lecture/Other. (A-F Only)

**MUSP (Music: Stage Production)**

**MUSP 151—MUSICAL THEATRE WORKSHOP** 2 Units  
(Formerly listed as MUSIC 157)  
Recommended for Success: Previous vocal experience.  
Intended for those interested in singing and acting. Study and performance of musical theatre. Public performance is required. Four maximum completions. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC  
(MJC Activities)

**MUSP 153—ADVANCED MUSICAL THEATRE WORKSHOP** 2 Units  
(Formerly listed as MUSIC 158)  
Recommended for Success: Satisfactory completion of MUSP 151/MUSIC 157 or equivalent.  
Intended for those interested in singing and acting. Study and performance of musical theatre. Public performance is required. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

**MUST (Music: Theory)**

**MUST 101—MUSIC FUNDAMENTALS 1** 3 Units  
(Formerly listed as MUSIC 100)  
Basic music theory concepts such as rhythm, musical notation, tonality, scales, key signatures, intervals and chords. Basic aural skills concepts such as rhythmic drills and sight singing using solfege. (A-F Only) Lecture. Transfer: CSU, UC  
(IGETC 1)

**MUST 102—MUSIC FUNDAMENTALS 2** 3 Units  
(Formerly listed as MUSIC 101)  
Prerequisite: Satisfactory completion of MUST 101/MUSIC 100  
Recommended for Success: Satisfactory completion of MUSA 121/MUSIC 120 and MUST 130/MUSIC 197.  
A continuation of MUST 101. Further study of intervals, rhythm, chord construction with application to the keyboard, ear training, sight singing, and simple dictation. Lecture/Laboratory. Transfer:
MUST 103 — MUSIC, BIRTH TO K: THEORY AND PRACTICE  3 Units
(Formerly listed as MUSIC 176)
Also offered as CLDDV 293
Recommended for Success: Before enrolling in this class students are strongly advised to possess the following basic music skills: ability to read music (note names, melody and rhythm) and define and apply basic music vocabulary, or have successfully completed one or more of the following courses: MUST 101/MUSIC 100, MUSA 121/MUSIC 120, MUSA 161/MUSIC 127, MUSA 161/MUSIC 131 or MUSA 153/MUSIC 133.
Introduction to the methods of teaching music to children (birth to Kindergarten). Theories on the development of the mind and the benefit of musical understanding to musicianship as well as overall child development. Kodaly, Orff, Dalcroze and other methods will be covered. Relationship of child development theory and developmentally appropriate practice. Study of classroom implementing process. First in a two course sequence. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU.

MUST 106 — MUSIC, BIRTH TO K: APPLICATION  3 Units
(Formerly listed as MUSIC 177)
Also offered as CLDDV 294
Prerequisite: Satisfactory completion of CLDDV 293/MUST 103/MUSIC 176.
Application of the methods of teaching music to children (birth to Kindergarten) at an infant/toddler or preschool center with instructor supervision. Students will continue to draw connections between basic music skills, methods of teaching theories, child development, and developmentally appropriate practice. Second in a sequence of two courses. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU.

MUST 111 — RHYTHMIC SKILLS  1 Unit
(Formerly listed as MUSIC 119)
Introduction to terminology and symbols used in the rhythmic notation of music, and to facilitate the development of the ability to read, write and accurately perform rhythmic figures with proper inflexion and artistic phrasing. Four maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU.

MUST 120 — MUSIC THEORY REVIEW  1 Unit
(Formerly listed as MUSIC 183)
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUST 101, or have had at least two years of high school or community ensemble performance experience; and have declared music as their major. Designed to prepare music majors for the required music theory sequence; review of fundamentals of music theory, rhythmic and pitch notation, terminology, diatonic intervals, chords, inversions, figured bass. Roman numeral analysis. Lecture. (A-F or P/NP) Transfer: CSU.

MUST 121 — MUSIC THEORY 1  3 Units
(Formerly listed as MUSIC 102)
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUST 101
Concurrent enrollment required in MUST 131/MUSIC 104.
Brief review of primary music fundamentals topics: tonality, introduction to common harmonic practice through exercises in part-writing and figured bass; simple exercises in guided composition and Roman numeral analysis. (A-F or P/NP). Transfer: CSU, UC, (CC MUSIC 20A) General Education: (IGETC: 3A)

MUST 122 — MUSIC THEORY 2  3 Units
(Formerly listed as MUSIC 103)
Recommended for Success: Before enrolling in this course, students are strongly advised to enroll concurrently in MUST 132.
Prerequisite: Satisfactory completion of MUST 121.
Concurrent enrollment in MUST 130
Continued development of technique in common harmonic practice through analysis, part-writing, and figured bass; exercises and original composition. Introduction to modulation and secondary dominants; introduction to phrase and period structure, introduction to all seventh chord types (A-F or P/NP). Transfer: CSU, UC (TCSU MUS 140) (CC MUSIC 201) General Education: (IGETC: 3A)

MUST 123 — MUSIC THEORY 3  3 Units
(Formerly listed as MUSIC 106)
Prerequisites: Satisfactory completion of MUST 122
Concurrent Enrollment: MUST 130
Recommended for Success: Concurrent enrollment in MUST 133.
Continuation of study of structural elements of music such as melody, rhythm, harmony and form with emphasis on the organization of these elements; study of chromatic alteration, expansion of harmonic resources through chromaticism; study of binary and sonata form. Lecture. Not offered every semester. Transfer: CSU, UC (CC MUSIC 21A) General Education: (CSU-GE: C1) (IGETC: 3A)

MUST 124 — MUSIC THEORY 4  3 Units
(Formerly listed as MUSIC 107)
Prerequisites: Satisfactory completion of MUST 123
Concurrent Enrollment: MUST 130
Recommended for Success: Concurrent enrollment in MUST 134.
Continuation development of analytical techniques; study of fugue and basic tonal counterpoint; introduction to Impressionism and to twentieth century structural techniques; study of ternary structures and rondo form. Lecture. Not offered every semester. Transfer: CSU, UC (CC MUSIC 21A) General Education: (IGETC: 3A)

MUST 130 — PRACTICA MUSICA  1 Unit
(Formerly listed as MUSIC 197)
Concurrent Enrollment: MUST 121, MUST 122, MUST 123 or MUST 124.
Development of aural and rhythmic skills by means of computer assisted participation. Exposure to standard western art music repertoire by means of guided listening. Four maximum completions. Laboratory. Transfer: CSU (TCSU MUS 160)(CC MUSIC 4A)

MUST 131 — AURAL SKILLS 1  1 Unit
(Formerly listed as MUSIC 104)
Corequisite: Satisfactory completion of or concurrent enrollment in MUST 121
Introduction to sight singing techniques using ‘moveable Do’, solfege and rhythmic syllables; supplements the study of music theory by practical application of concepts learned through singing, rhythmic reading analysis and dictation. (A-F or P/NP) Lecture/Laboratory. Transfer: CSU, UC (CAN MUS 2, CAN MUS SEQ A)

MUST 132 — AURAL SKILLS 2  1 Unit
(Formerly listed as MUSIC 105)
Corequisite: Satisfactory completion of or concurrent enrollment in MUST 122.
Continuation of MUST 131; further development of techniques for sight singing, taking melodic and rhythmic dictation. (A-F or P/NP) Transfer: CSU, UC

MUST 133 — AURAL SKILLS 3  1 Unit
(Formerly listed as MUSIC 108)
Prerequisite: Satisfactory completion of MUST 132
Recommended for Success: Concurrent enrollment in MUST 123.
Continuation of materials presented in preceding applied music theory courses. Development of individual proficiency in sight-singing, dictation, aural, rhythmic and keyboard skills. Field trips may be required. Lecture/Laboratory. (Fall) Transfer: CSU, UC (CC MUSIC 5B)

MUST 134 — AURAL SKILLS 4  1 Unit
(Formerly listed as MUSIC 109)
Prerequisite: Satisfactory completion of MUST 133
Recommended for Success: Concurrent enrollment in MUST 124.
Continuation of materials presented in preceding applied music theory courses. Development of individual proficiency in sight-singing, dictation, aural, rhythmic and keyboard skills. Field trips may be required. Lecture/Laboratory. (Spring) Transfer: CSU, UC (CC MUSIC 5B)
NR
(Natural Resources)

In this program the student will develop skills and knowledge in animal/plant science and I.D., mechanics, communications, public relations, and computations specific to become a park ranger maintenance person, or private entrepreneur in allied jobs including game farm worker. This program will also prepare the student for transfer to a state university or university program when the General Education requirements are completed. Contact the division office in the Agriculture Building for advising assistance.

NR 50—SURVEY OF NATURAL RESOURCES 3 Units
Survey of natural resources, their importance to society and ecological principles of resource conservation, identification, conservation, and use of renewable and non-renewable resources; career opportunities and industries associated with natural resources. Field laboratories, including some Saturdays, required. Lecture/Laboratory.

NR 53—INTRODUCTION TO AGRICULTURE RESOURCES AND RURAL REcreation 3 Units
Natural resources as industries and basic skills relate to natural resources management. Concepts in natural resources management, soil and land, water, forest, fish and wildlife, outdoor recreation, energy, mineral and metal resources, and opportunities for employment. Field trips required. Lecture/Laboratory.

NR 200—SOILS 4 Units
Study of soil derivation, classification and characteristics. Soil use and management including erosion, moisture, retention, structure, cultivation, organic matter and microbiology. Laboratory topics include soil type, classification, and soil reaction, soil fertility and physical properties of soil. Field laboratories required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC. General Education: (MJC-GE:A) (CSU-GE: B1, B3)

NR 215—WILDLIFE PRODUCTION 3 Units
Wildlife production and management and its relationship to humans; managing game for sustained yields. Production principles for common game species found in this area; habitat improvement; species compatibility and interrelationships; wildlife and fish identification. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU [CC NATRC 181] General Education: (MJC-GE:A)

NR 220—INTRODUCTORY FORESTRY 3 Units
Introduction to the integrated management of trees, soils, water, fish and wildlife for the production of wood and fiber products. Emphasis will be on both the traditional and emerging uses of the forest resources to satisfy human needs and the protection of the public trust. Field trips required. (A-F Only). Transfer: CSU, UC [CC FORES 1] General Education: (MJC-GE:A)

NR 222—NATIVE TREE AND SHRUB IDENTIFICATION 3 Units
Formerly listed as: "Native Plants Identification"
The study of botanical characteristics, taxonomy, physiology, and community relationships of the major trees and shrubs in California and the Western United States. Includes discussion of commercial uses and geographic "ranges of native plants common to the region. Field trips outside of regular class hours. Field trips required. (A-F Only). One completion allowed. Transfer: CSU

NR 224—INTRODUCTION TO FOREST MEASUREMENT 3 Units
Recommended for Success: Satisfactory completion of EHS 201 or 202 or NR 220 or 222 or 376, or equivalent.
Introduction to principles and practices of interpreting aerial photographs. Emphasis on vegetation typing, mapping, road reconnaissance and inventory techniques. Use of aerial photographs to obtain location, area, vegetation types, timber volume. Explanation of Geographic Information Systems and its application to forestry and natural resources. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU [CC NATRE 160]

NR 230—OUTDOOR/FOREST RECREATION 3 Units
A study of historic, social, political, economic, and environmental factors influencing outdoor recreation at federal, state, and local levels. Survey of conflicts in natural resources land use and solutions to these conflicts. Maintenance and operation of recreational facilities. Field trips may be required. (A-F Only) Transfer: CSU

NR 376—FORESTRY TECHNOLOGY 3 Units
Additional training in silviculture, cruising, forest management, harvesting, and regulations as determined by the California Forest Practice Act. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: (CC FORTEC 160)

NR 379—WILDLAND FIRE CONTROL 1 Unit
Introduction to fundamentals of wildland fire behavior, basic fire fighting strategy, methods of attack to suppress wildland fires. Course is taught in conjunction with U.S. Forest Service. Field trips required. Lecture/Laboratory. (A-F Only) (CC NATRE 22)

NURSE
(Nursing)

NURSE 40—NURSE ASSISTANT 5 Units
Recommended for Success: High school diploma or GED Enrolment limited to students who: have had a physical examination within the last three months, can provide confirmation of a PPD, and can successfully pass a criminal background screening through the Livescan fingerprint process.
Preparation for employment as a nurse assistant in a skilled nursing facility. Upon satisfactory completion of the course, the student is eligible to take the state examination for certification as a Certified Nurse Assistant (CNA). Based on the Model Curriculum for Nurse Assistant Training and Assessment Program following Department of Health Services Guidelines. Organized in fifteen units with content ranging from role and responsibilities of the CNA to death and dying. Student must attend lecture on Thursday and Friday 1 p.m. to 5 p.m. for the first 2 weeks of the term. No lab the first 2 weeks of the term. Approximate lab hours 6 a.m. to 2:30 p.m. Purchase of appropriate uniforms for the clinical site is the responsibility of the student. The state certification test fee is the responsibility of the student. Materials fee required. (A-F Only).

NURSE 115—INTRODUCTION FOR NURSING MAJORS ½ Unit
Acquaints students with the academic requirements and curriculum for the Associate Degree Nursing program. Students view the role and function of the nurse. Students analyze their educational needs and goals and choose alternatives to enhance success through nursing education. Students will understand the curriculum requirements that pertain to them and begin to formulate an educational plan for an associate of science degree in nursing. The role of aptitudes, interests, values and skills will be addressed. Important aspects of nursing as an occupational choice will be covered along with information regarding the nursing profession. Field trips are not required. (P/NP Only) Transfer: CSU

NURSE 259—LVN TRANSITION: ROLE CHANGE PREPARATION 1 Unit
Prerequisite: Students must provide evidence of licensure as a Licensed Vocational Nurse (LVN) in the State of California, and completion of ADN program prerequisites. Concurrent enrollment in NURSX 800 Applies skills and knowledge required for Licensed Vocational Nurses desiring to enter the 3rd semester of the Associate Degree Nursing program. Concepts and principles of the Nursing Process; role transition, legal, ethical and regulatory issues; and clinical skills inherent in the Registered Nurse role. Lecture/Laboratory. Materials fee required. One completion allowed. (Fall, Spring) (A-F Only). Transfer: CSU
NURSE 260—NURSING PROCESS: PHARMACOLOGY 2 Units
Prerequisite: Acceptance into the Associate Degree Nursing program. Concurrent enrollment in: NURSE 261 and NURSK 800 Recommended for Success: Satisfactory completion of FDNTR 219 Enrollment limited to: Capacity of MJC Nursing Program
Introduction to concepts of Pharmacology, including pharmacokinetics, pharmaceutical systems of measurements and calculations, drug classifications, and nursing responsibilities in medical administration. Lecture. One completion allowed. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 261—NURSING PROCESS: FUNDAMENTALS 8 Units
Prerequisites: Acceptance into the MJC Associate Degree Nursing Program Concurrent enrollment in: NURSE 260 and NURSK 800 Recommended for Success: Satisfactory completion of NURSE 115, FDNTR 219 Enrollment limited to: Capacity of MJC Nursing Program
Applies fundamental concepts and principles of the nursing process to the care and needs of patients within the acute care setting. Focus on assessment and care of patients experiencing alterations in basic health needs. Practice of basic clinical skills in a simulated lab setting prior to beginning care in the acute care facility. Additional theoretical principles include therapeutic communication, patient teaching, professional ethics, and legal aspects of nursing. Lecture/Laboratory. Field trips may be required. Materials fee required. One completion allowed. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 262—NURSING PROCESS: SKILLS ½ Unit
Prerequisites: Satisfactory completion of NURSE 260 and NURSE 261 Concurrent enrollment in: NURSK 800 Enrollment limited to: Capacity of MJC Nursing Program
Prepares the nursing student to perform nursing skills necessary for satisfactory participation in the obstetric and pediatric clinical setting. Skills include intravenous therapy, gavage feeding, infant bathing, delivery table set-up, and correct administration of medications. Materials fee required. Laboratory. (A-F Only) (Fall, Spring) Transfer: CSU

NURSE 263—NURSING PROCESS: MATERNITY 4 Units
Formerly listed as “NURSE 252 - Nursing Process 1” Prerequisite: Satisfactory completion of NURSE 260 and 261 Corequisite: NURSK 800 Enrollment limited to: Capacity of MJC Nursing Program
Applies the basic principles and concepts of the nursing process to meeting the needs of the childbearing woman, family, and patient with alterations of the reproductive system. Health maintenance, prevention of illness, and patient/family teaching in the hospital and community setting will be emphasized. Includes socio-cultural-spiritual aspects of the family. Field trips may be required. Lecture/Lab. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 264—NURSING PROCESS: PEDIATRICS 4½ Units
Formerly listed as “NURSE 252 - Nursing Process 2” Prerequisite: Satisfactory completion of NURSE 260 and 261 with a grade of “C” or better. Corequisite: NURSK 800 Enrollment limited to: Capacity of MJC Nursing Program
Applies the principles and concepts of the nursing process to meeting the adaptation needs of the pediatric patient and patient with alterations of the reproductive system. Family-centered care in the hospital and outpatient setting will be emphasized. Health maintenance and prevention of illness is emphasized in patient/family teaching throughout the course. Field trips may be required. One completion allowed. Lecture/Lab. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 265—NURSING PROCESS: MEDICAL-SURGICAL 6 Units
Formerly listed as “NURSE 253 - Nursing Process 3” Prerequisites: Satisfactory completion of NURSE 262, 263, and 264 with a grade of “C” or better Concurrent enrollment in: NURSK 800 Enrollment limited to: MJC Nursing Program capacity.
Applies the principles and concepts of the nursing practice that focus on promoting adaptation of adolescent and adult clients with serious or complex health alterations. Students will complete didactic units in oxygenation, cardiovascular, hematological, immunological, and oncologic nursing. Acute hospital settings and hospice services will be utilized for the clinical practicum of the course. Lecture/Lab. Materials fee required. Field trips may be required. One completion allowed. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 266—NURSING PROCESS: MENTAL HEALTH 4 Units
Formerly listed as “NURSE 253 - Nursing Process 4” Prerequisites: Satisfactory completion of NURSE 262, 263, and 264 Concurrent enrollment in: NURSK 800 Enrollment limited to: MJC Nursing Program capacity.
Applies the principles and concepts of the nursing practice to meet the needs of clients with psychiatric disorders across the life span. Mental health maintenance, prevention of illness, patient/family teaching, and therapeutic communication/relationships will be emphasized. Students will be assigned to an acute psychiatric setting and tertiary areas that support and provide community mental health care services. Lecture/Lab. Field trips may be required. One completion allowed. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 267—NURSING PROCESS: 11 Units
Formerly listed as “NURSE 254 - Nursing Process 4” Prerequisites: Satisfactory completion of NURSE 265 and 266 Concurrent enrollment in: NURSK 800 Enrollment limited to: MJC Nursing Program capacity.
Includes advances in medical/surgical concepts and principles in the nursing process. Promotes role transition from student nurse to professional nursing through a clinical preceptorship. The student is responsible for all clinical skills learned in previous semesters, acquires new skills and tasks a clinical competency test in the acute care setting. The five-week, 156 hour preceptorship is the capstone of the nursing program, encompassing all clinical, technical, and critical thinking skills learned in the program, and emphasizing leadership in management of the patient care. In preceptorship, the student works directly with a registered nursing preceptor in the acute care facility. Materials fee required. Materials fee required. One completion allowed. (Fall, Spring) (A-F Only) Transfer: CSU

NURSE 268—VOCATIONAL NURSE 1 14 Units
Enrollment limited to those admitted to the CNA to LVN program.
Applies the fundamentals of nursing to the care and needs of patients within the acute and long-term hospital setting. Care of patients with alterations in basic health care needs. Practice of fundamental clinical skills in a simulated lab setting prior to beginning care in the hospital. Lecture/Lab. Field trips required. (A-F Only) Transfer: CSU

NURSE 350—VOCATIONAL NURSE 12 Units
Enrollment limited to those admitted to the CNA to LVN program.
Applies the fundamentals of nursing to care and needs of patients within the acute and long-term hospital setting. Care of patients with alterations in basic health care needs. Practice of fundamental clinical skills in a simulated lab setting prior to beginning care in the hospital. Lecture/Lab. Field trips required. (A-F Only) Transfer: CSU

NURSE 351—VOCATIONAL NURSE 12 Units
Prerequisite: Satisfactory completion of NURSE 350
Apply concepts of care for adults with disorders of the musculoskeletal system, integumentary system, and cardiopulmonary system. Apply concept of mental health, wellness and illness, in health care. Practical experience will be in skilled nursing, health care clinics, and acute care settings. Lecture/Lab. (A-F Only)

NURSE 352—VOCATIONAL NURSE 13 Units
Prerequisite: Satisfactory completion of NURSE 351
Applies the basic principles and concepts of the nursing process to meet the adaptation needs of adult patients with disorders of the neurological system, gastrointestinal system, urinary system, endocrine system and the eye, ear, nose, and throat. Practical experience will be in skilled nursing facilities, health care clinics and acute care settings. (A-F Only) Lecture/Laboratory. Materials fee required.
NURSE 354—VOCATIONAL NURSE S 2 Units
Prerequisite: Satisfactory completion of NURSE 353
Applies the basic principles and concepts of the nursing process and leadership during preceptorship in a skilled nursing facility or health care facility. Lecture/Laboratory. (A-F Only)

NURSE 355—INTRAVENOUS THERAPY 1 Unit
Enrollment limited to Licensed Vocational Nurses or those who are eligible for NCLEX-PN
Applies the foundation and basic concepts of infusion therapy, including LVN nursing responsibilities in the initiation, maintenance, and therapeutic modalities of intravenous therapy. The course focuses on risk management and legal responsibilities, quality assessment and competency criteria, infection control practices related to infusion therapy, fundamentals of fluid and electrolyte balance, and special needs of the pediatric and geriatric population (A-F Only) Lecture/Laboratory. Materials Fee Required.

NURSE 356—VOCATIONAL NURSE S 2 Units
Prerequisite: Satisfactory completion of NURSE 355
Applies the principles and concepts of the nursing process and leadership during preceptorship in a clinical setting. Lecture/Laboratory. (A-F Only)

NURSE 357—INTRAVENOUS THERAPY 1 Unit
Enrollment limited to Licensed Vocational Nurses or those who are eligible for NCLEX-PN
Applies the foundation and basic concepts of infusion therapy, including LVN nursing responsibilities in the initiation, maintenance, and therapeutic modalities of intravenous therapy. The course focuses on risk management and legal responsibilities, quality assessment and competency criteria, infection control practices related to infusion therapy, fundamentals of fluid and electrolyte balance, and special needs of the pediatric and geriatric population (A-F Only) Lecture/Laboratory. Materials Fee Required.

NURSE 358—VOCATIONAL NURSE S 2 Units
Prerequisite: Satisfactory completion of NURSE 357
Applies the principles and concepts of the nursing process and leadership during preceptorship in a clinical setting. Lecture/Laboratory. (A-F Only)

NURSE 359—INTRAVENOUS THERAPY 1 Unit
Enrollment limited to Licensed Vocational Nurses or those who are eligible for NCLEX-PN
Applies the foundation and basic concepts of infusion therapy, including LVN nursing responsibilities in the initiation, maintenance, and therapeutic modalities of intravenous therapy. The course focuses on risk management and legal responsibilities, quality assessment and competency criteria, infection control practices related to infusion therapy, fundamentals of fluid and electrolyte balance, and special needs of the pediatric and geriatric population (A-F Only) Lecture/Laboratory. Materials Fee Required.

NURSE 360—VOCATIONAL NURSE S 2 Units
Prerequisite: Satisfactory completion of NURSE 359
Applies the principles and concepts of the nursing process and leadership during preceptorship in a clinical setting. Lecture/Laboratory. (A-F Only)

NURSE 361—WORK EXPERIENCE-NURSING 1 Unit
Corequisite: Satisfactory completion or concurrent enrollment: NURSE 262, 263, 264, 265, 266 or 267. If enrolled in Work Experience during the summer, the student must be in good standing in the Associate Degree Nursing (ADN) program and be enrolled in NURSE 299A or one other college course. Enrollment in a minimum of 7 units which MAY include Cooperative Vocational Work Experience. Summer session students need only complete one other course, regardless of units. Must be employable as Nurse Assistant.
Provides the student enrolled in the ADN program an opportunity to obtain nursing experience in a structured clinical work/study community service program in participating clinical agencies. Students gain additional practice in nursing by applying previously learned knowledge and skills. Lecture: 1 hour arranged. 75 hours related work experience per semester equals 1 unit.

NURSE 362—WORK EXPERIENCE-NURSING 2 Units
Corequisite: Satisfactory completion or concurrent enrollment: NURSE 262, 263, 264, 265, 266 or 267. If enrolled in Work Experience during the summer, the student must be in good standing in the Associate Degree Nursing (ADN) program and be enrolled in NURSE 299A or one other college course. Enrollment in a minimum of 7 units which MAY include Cooperative Vocational Work Experience. Summer session students need only complete one other course, regardless of units. Must be employable as Nurse Assistant.
Provides the student enrolled in the ADN program an opportunity to obtain nursing experience in a structured clinical work/study community service program in participating clinical agencies. Students gain additional practice in nursing by applying previously learned knowledge and skills. Lecture: 1 hour arranged. 150 hours related work experience per semester equals 2 units. May be completed up to 4 times. (P/NP only).

NURSE 363—WORK EXPERIENCE-NURSING 3 Units
Corequisite: Satisfactory completion or concurrent enrollment: NURSE 262, 263, 264, 265, 266 or 267. If enrolled in Work Experience during the summer, the student must be in good standing in the Associate Degree Nursing (ADN) program and be enrolled in NURSE 299A or one other college course. Enrollment in a minimum of 7 units which MAY include Cooperative Vocational Work Experience. Summer session students need only complete one other course, regardless of units. Must be employable as Nurse Assistant.
Provides the student enrolled in the ADN program an opportunity to obtain nursing experience in a structured clinical work/study community service program in participating clinical agencies. Students gain additional practice in nursing by applying previously learned knowledge and skills. Lecture: 1 hour arranged. 225 hours related work experience per semester equals 3 units. May be completed up to 4 times. (P/NP only).

NURSE 364—WORK EXPERIENCE-NURSING 4 Units
Corequisite: Satisfactory completion or concurrent enrollment: NURSE 262, 263, 264, 265, 266 or 267. If enrolled in Work Experience during the summer, the student must be in good standing in the Associate Degree Nursing (ADN) program and be enrolled in NURSE 299A or one other college course. Enrollment in a minimum of 7 units which MAY include Cooperative Vocational Work Experience. Summer session students need only complete one other course, regardless of units. Must be employable as Nurse Assistant.
Provides the student enrolled in the ADN program an opportunity to obtain nursing experience in a structured clinical work/study community service program in participating clinical agencies. Students gain additional practice in nursing by applying previously learned knowledge and skills. Lecture: 1 hour arranged. 300 hours related work experience per semester equals 4 units. May be completed up to 4 times. (P/NP only).

OFADM 201—INTERMEDIATE KEYBOARDING 1 Unit
Recommended for Success: Before enrolling for this course, students are strongly advised to have completed at least one semester of keyboarding and type a minimum of 45 gross words per minute on a five-minute test.
First of three modules in OFADM 203. Further development of keyboarding with an emphasis on speed and accuracy; practice and drill on production keyboarding, drill and practice on formatting techniques and procedures for setting up business letters, academic and business reports, tables, business forms, including interoffice memoranda, resumes, minutes, and agendas. Individualized instruction. Open entry/open exit. (A-F Only) Transfer: CSU

OFADM 202—INTERMEDIATE KEYBOARDING 2 Units
Recommended for Success: Before enrolling for this course, students are strongly advised to have completed at least one semester of keyboarding and type a minimum of 45 gross words per minute on a five-minute test.
Second of three modules in OFADM 203. Further development of keyboarding with an emphasis on speed and accuracy; practice and drill on production keyboarding, drill and practice on formatting techniques and procedures for setting up business letters, academic and business reports, formal reports and all components, tables, business forms, including interoffice memoranda, resumes, minutes, and agendas. Individualized instruction. Open entry/open exit. (A-F Only) Transfer: CSU

OFADM 203—INTERMEDIATE KEYBOARDING 3 Units
Recommended for Success: Before enrolling for this course, students are strongly advised to have completed at least one semester of keyboarding and type a minimum of 45 gross words per minute on a five-minute test.
Further development of keyboarding with an emphasis on speed and accuracy; practice and drill on production keyboarding, drill and practice on formatting techniques and procedures for setting up business letters, academic and business reports, formal reports and all components, tables, business forms, including interoffice memoranda, resumes, minutes, and agendas. Also, the design and creation of effective office forms and publications, such as letterheads, notepads, cover pages, announcements, flyers, and newsletters. Individualized instruction. Open entry/open exit. (A-F Only) Transfer: CSU
OFADM 231—INTERMEDIATE WORD PROCESSING 3 Units
Recommended for Success: Satisfactory completion of OFADM 203 and either OFADM 330 or CMPSC 274.
Intermediate word processing features such as mail merge, macros, styles, graphics, tabs, and sorts. Features will be applied in creating business documents. Two maximum completions. Lecture/Laboratory. Transfer: CSU (CC OFTEC 141)

OFADM 232—ADVANCED WORD PROCESSING AND DESKTOP PUBLISHING 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete (CMPSC 231 or OFADM 231), or demonstrate prior knowledge of word processing software.
Application of advanced word processing techniques and procedures including those features relating to desktop publishing. For students who are already knowledgeable in word processing software. Field trips are not required. Lecture/Laboratory. Transfer: CSU

OFADM 301—BEGINNING KEYBOARDING 1½ Units
Development of basic alpha/numeric keyboarding skills needed for the operation of the keyboard by touch. Drills to develop speed and accuracy on straight copy. Designed for students with no previous keyboarding/typewriting experience. Lecture/Laboratory. (A-F Only) Transfer: CSU

OFADM 302—BEGINNING DOCUMENT PROCESSING 1½ Units
Recommended for Success: Satisfactory completion of OFADM 301 or ability to keyboard by touch at 25 GWAM.
Further development of speed and accuracy on the alpha/numeric keyboard. Instruction in opening, saving, naming, printing documents; deletion and addition of text; margin/tab settings; spacing techniques; text editing techniques; vertical/horizontal centering, basic business letter, memo and report formats. Laboratory. (A-F Only) Transfer: CSU (CC OFTEC 120)

OFADM 303—KEYBOARDING FOR SPEED AND ACCURACY ½ Unit
Recommended for Success: Satisfactory completion of OFADM 301 or ability to keyboard by touch at 25 GWAM.
Keyboarding course designed to diagnose a student's current keyboarding skills needs, prescribe appropriate practice materials, measure skill development, improve speed and accuracy, and continually evaluate the skill-building process. Four maximum completions. (A-F Only)

OFADM 304—PROFESSIONAL ENGLISH FOR BUSINESS 3 Units
Recommended for Success: Satisfactory completion of ENGL 49 or equivalent placement by the MJC assessment process.
Review of the mechanics of correct English usage as applied in the business environment. Emphasis on sentence structure, word usage, punctuation, spelling, business vocabulary, dictionary usage, grammar review, and proofreading. Heavy emphasis is placed on the use of various business documents throughout the course for students to apply their writing skills. Lecture.

OFADM 305—RECORDS MANAGEMENT 3 Units
Filing rules and their application to alphabetic, numeric, geographic, and subject systems; establishing manual and computer filing systems; records, control, retention, transfer, equipment, and supplies, micrographics; using the computer to store, organize, maintain, and retrieve information. Field trips may be required. Lecture/Laboratory.

OFADM 311—BUSINESS EDITING AND PROOFREADING 3 Units
Recommended for Success: Ability to keyboard assignments.
Development of skills in transcribing typed and handwritten notes using word processing and voice recognition tools. Emphasis will be placed on the mechanics of letter styles, as well as grammar, punctuation, spelling, vocabulary, syllabication, capitalization, proofreading, and use of figures. One completion allowed. (A-F or P/NP) Lecture.

OFADM 312—ALPHABETIC NOTETAKING 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 301.
Abbreviated writing system, using the alphabet, designed to give students a quick and easy method of writing in a short period of time. Designed for academic or job-related activities with emphasis on increasing speed in taking notes for college or business. Lecture. (A-F Only)

OFADM 313—OFFICE SKILLS 3 Units
A study of various positions available in an office. Emphasis on location, skills, salary, benefits and retirement packages of office positions. Covers entry-level skills and experiences necessary for beginning office positions, including career planning, telephone and time management skills.
Recommended as a first semester course for students pursuing an Office Administration or Clerical certificate or degree. Field trips may be required. Lecture.

OFADM 314—OFFICE PROCEDURES AND TECHNOLOGIES 3 Units
Recommended for Success: Satisfactory completion of OFADM 203 or 231.
A study of the attributes and skills needed to work in an office. Explores duties of receptionist, office clerk, word processing operator, and administrative assistant. Covers topics in telecommunications, reprographics, oral and written communications, mailing and shipping, and financial record keeping. Field trips may be required. Lecture. (Fall Only) (CC OFTEC 131)

OFADM 315—TODAY'S OFFICE 2 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to have completed all Required Courses for Office Administration or Clerical degree or certificate.
Provides a simulated office environment to give students the experience that is often necessary in obtaining and keeping an office position. Students will be “hired” as an employee within the simulated office with the availability of transferring to other positions later in the course. Application of skills and knowledge necessary to be an effective employee will be emphasized. Upon mastery of necessary skills, students may be placed as interns in offices to gain additional experience. The course should be taken in the student’s last semester before graduation or certificate completion. (A-F or P/NP) Laboratory. (Spring Only)

OFADM 320—TELEPHONE TECHNIQUES 1 Unit
Development of effective use of the telephone: Scenarios include appropriate greetings, placing callers on hold, dealing with difficult callers, and communication on the telephone. Telephone equipment and services are also covered. Lecture/Laboratory. (A-F or P/NP)

OFADM 328A,B—MACHINE TRANSCRIPTION 1,2 Units
Recommended for Success: Satisfactory completion of (OFADM 311 or 304) and ability to keyboard 40 gross words per minute on a five minute test.
Instruction and practice in the use of a standard transcription machine. Individualized instruction in the keyboarding of general business documents including letters, memoranda and reports. Open entry/open exit. Two maximum completions for 328A only. (A-F Only) Transfer: CSU (CC OFTEC 121)

OFADM 330—BEGINNING WORD PROCESSING 3 Units
Recommended for Success: Beginning keyboarding or equivalent. Introduction to the use and capabilities of word processing software with hands on experience in creating, revising and printing documents. Course designed for initial exposure to word processing.
Students who have completed CMPSC 201, 202, or 274 or OFADM 356 should enroll in OFADM/CMPSC 231. Two maximum completions. Lecture/Laboratory.

OFADM 351—INTRODUCTION TO COMPUTERS AND WINDOWS 1 ½ Unit
Recommended for Success: Ability to keyboard by touch.
Basic introduction to computers and the Windows Operating Environment. Course will explain components of a computer system and provide hands-on training using a personal computer with Windows software. Course is for students new to using personal computers and the Windows environment. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 352—INTRODUCTION TO COMPUTERS AND WINDOWS 2 ½ Unit
Recommended for Success: Ability to keyboard and OFADM 351.
Continuation of OFADM 351. Explores Windows accessories, providing hands-on experience in the use of the features and use of a graphical user interface. Lecture/Laboratory. Materials fee required. (A-F Only)
OFADM 353—INTRODUCTION TO COMPUTERS AND WINDOWS
Recommended for Success: Ability to keyboard.
A combination of OFADM 351 and 352 courses. Basic introduction to computers and the Windows Operating Environment. Explains components of a computer system and provide hands-on training using a personal computer. Intended for students new to using personal computers and the Windows environment. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 354—INTRODUCTION TO WORD PROCESSING 1
Recommended for Success: Ability to keyboard by touch.
An introductory course in word processing. Features of word processing software presented in a hands-on learning environment. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 355—INTRODUCTION TO WORD PROCESSING 2
Recommended for Success: Satisfactory completion of OFADM 354
A continuation of the OFADM 354 course—Introduction to Word Processing. The course is designed for learning document processing through application of word processing software features. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 356—INTRODUCTION TO WORD PROCESSING
Recommended for Success: Ability to keyboard by touch.
A combination of the OFADM 354 and 355 courses. A beginning course in the use of word processing software. Features of the software will be explained and demonstrated in a hands-on learning environment. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 357—INTRODUCTION TO SPREADSHEET 1
Recommended for Success: Satisfactory completion of OFADM 351
Introduction to spreadsheet software. Spreadsheets features applied to the creation of worksheets. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 358—INTRODUCTION TO SPREADSHEET 2
Recommended for Success: Satisfactory completion of OFADM 357
A continuation of OFADM 357. Spreadsheet charts, worksheet layout, sorting and copying. Two maximum completions. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 359—INTRODUCTION TO SPREADSHEET
Recommended for Success: Satisfactory completion of OFADM 353
A combination of OFADM 357 and 358. Introduction to spreadsheet features applied to the creation of worksheets, charts, worksheet layout, sorting, and copying. Lecture/Laboratory. Materials fee required. (A-F Only)

OFADM 361—INTRODUCTION TO DATABASES
Recommended for Success: Satisfactory completion of OFADM 353.
A beginning course using features of database software. Course is designed to enable students to learn and apply the features of database software to organize information and to work with stored information. Two maximum completions. Lecture. Materials fee required. (A-F Only)

OFADM 362—INTRODUCTION TO BUSINESS PRESENTATION SOFTWARE
Recommended for Success: Satisfactory completion of OFADM 353.
A beginning course using computer software to design slides, outlines, note pages, and audience handouts for business presentations. Two maximum completions. Open entry/open exit. Materials fee required. (A-F Only)

OFADM 363—UNDERSTANDING THE INTERNET
Fundamentals of using the internet. Topics included in the course: internet terminology, use of browsers, search engines and sites, downloading of files and e-mail. (A-F Only)

OFADM 364—GRAMMAR IN THE OFFICE
Basic English grammar for office employees. Emphasis on parts of speech, subject and verb agreement, pronoun usage, sentences, punctuation, number usage, and business terms. Proofreader’s marks and symbols are introduced, and strategies for effective business writing are presented. Open entry/open exit. (A-F Only)

OFADM 366—PROOFREADING TECHNIQUES
Recommended for Success: Satisfactory completion of OFADM 304.
A self-paced course addressing the skills needed to identify mechanical and content errors in handwritten or printed text by using proofreader’s marks. Grammar, punctuation, and spelling rules will be reviewed. (A-F Only)

OFADM 375—10-KEY ON THE COMPUTER
Recommended for Success: Satisfactory completion of OFADM 301 or ability to keyboard by touch.
Touch system of numeric keys on the 10-key pad. Materials fee required. Open entry/open exit. (A-F Only)

OLDAD (Older Adults)

OLDAD 820—JEWELRY AND METALCRAFT
Techniques and the construction of jewelry from copper, bronze, sterling silver, and gold; setting of stones in jewelry; and techniques of the lost wax method of casting. Designed for older adults but open to all students. Unlimited repeats. Field trips may be required. Laboratory. Not a graded course.

OLDAD 822—LAPIRARY
Basic lapidary skills, faceting, grinding, polishing, and mounting of semiprecious, precious, and ornamental stones. How to recognize, procure, and develop gem materials, experiment with, and display gem ornamentation showing utility and craftsmanship. Diamond saw cutting, carving in stone table tops, and the making of mosaics and intarsia. Designed for older adults but open to all students. Unlimited repeats. Field trips required. Laboratory. Not a graded course.

OLDAD 830—PUBLIC SPEAKING: TALKING IT OUT
Development of effective listening, thinking and speaking skills among the older adult population. Course builds and reinforces speech development skills. Unlimited repeats. Lecture. Not a graded course.

OLDAD 874—CLOTHING CONSTRUCTION THROUGH KNITTING
Learn care of different types of fiber such as wool, cotton, and synthetic, the importance of gauge and weights of yarn and their uses. Basic skill development in knit, pearl, cast on and cast off, increase and decrease. Introduction to different knitting techniques such as intarsia, mosaic, fair isle, and decorative stitches and ways to implement them into garments. Not a graded course.

PE (Physical Education)
The Physical Education program at MJC offers a balanced approach based upon the individual interests and needs of the student. In addition to a wide spectrum of physical education activity classes, MJC offers intercollegiate competition in many sports and adaptive physical education courses. Theory classes are offered in basketball, football, track and field, wrestling, softball, and baseball. Since the majority of career opportunities in Physical Education exist for students completing a bachelor’s degree, general education and transfer courses are...
carefully planned so that students are well prepared for individual career needs and upper division college work.

Courses should be selected with the assistance of a Physical Education faculty advisor. Students interested in a career in Physical Education are encouraged to take a variety of activity classes each semester, thereby broadening their activity skills before transfer.

Repeat Limitations on Physical Education Courses
No activity may be taken more than four times, regardless of the number of skill levels it may have listed. Persons who have met the limit of repetition of credit courses as stated in the catalog may audit the course with the approval of the instructor. Auditors receive no credit for class work, no grade, and no record is kept of their performance in class. Enrollment is allowed after the first day of instruction. An Audit Enrollment Form can be obtained in the Admissions office after staff verify that the repeat limit has been reached. This form must be signed by the instructor and the student and turned in to the Admissions Office along with a payment of $15.00 per unit paid to the Business Office. Students enrolled in ten (10) or more units at the time audit enrollment occurs will not be assessed the fee up to three (3) units.

For purposes of this limitation, activities are defined as Adaptive, Baseball, Basketball, Body Mechanics, Bowling, Cross Country, Dance, Diving, Fencing, Football, Golf, Gymnastics, Lifesaving, Racquetball, Self-Defense, Soccer, Softball, Swimming, Table Tennis, Tennis, Track and Field, Volleyball, Water Polo, Weight Training, and Wrestling.

- CSU - 12 units maximum.
- UC – See UC All Campus Credit List for credit limitations

(Available in Counseling Office)

Activities Requirement for Degree
Physical Education classes used to fulfill the graduation activities requirement must be from the PEA, PEC, PEM, PEW, PEVM, or PEVW class listings.

PE 90A, B – ASSISTING IN ADAPTED PHYSICAL EDUCATION 1, 2 Units
Prerequisite: Satisfactory completion of PE 122
Experience working with physically limited students enrolled in the PEA programs. Emphasis on application and improvement in skills acquired in PE 122. Opportunity to work with students with a wide range and varying degrees of disabilities and disease manifestations. PE 90A has four maximum completions and PE 90B has two maximum completions. Laboratory.

PE 100 — INTRODUCTION TO PHYSICAL EDUCATION 3 Units
History, philosophy, and principles of physical education. Study of the aims and objectives of modern physical education with emphasis on the development of basic philosophy and background for the profession of physical education. Lecture. (A-F Only) Transfer: CSU, UC

PE 101 — BASKETBALL THEORY 1 Unit

PE 102 — OFFENSIVE FOOTBALL THEORY 2 Units
An analysis of offensive position and team play. Critical analysis of offensive techniques, rules, physical and mental training procedures, and film evaluation. Lecture. Transfer: CSU, UC

PE 103 — TRACK AND FIELD TEAM CONCEPTS 1 Unit
Specialized approach to track and field. Rules, training procedures, strategy, and performance evaluation. Two maximum completions. Lecture. Transfer: CSU, UC

PE 104 — WRESTLING THEORY 1 Unit

PE 105 — DEFENSIVE FOOTBALL THEORY 2 Units
An analysis of defensive position and team play. Critical analysis of defensive techniques, rules, physical and mental training, and film evaluation. Lecture. Transfer: CSU, UC, (Fall)

PE 106 — OFFENSIVE BASEBALL THEORY 2 Units
An analysis of offensive techniques, position and team play. Coverage of rules and training procedures. Two maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU, UC

PE 107 — DEFENSIVE BASEBALL THEORY 2 Units
Analysis of defensive techniques, position and team play. Coverage of rules and training procedures. Two maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU, UC

PE 108 — CARE AND PREVENTION OF ATHLETIC INJURIES 3 Units
Designed for prospective coaches, trainers, health and physical educators, and athletes, to aid in the recognition, evaluation and care of athletic injuries. Techniques in taping, prevention, and rehabilitation of injuries. Sport specific injuries are examined and discussed to familiarize students with the multitude of injuries that can occur in sporting activities. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC-H-HP 4)

PE 109 — PEAK PERFORMANCE THROUGH MENTAL TRAINING 3 Units
The study and practical experience in techniques for maximizing sport and dance performance through the development of mental skills and strategies for stress control, imagery, goal setting, and concentration. Lecture. Transfer: CSU, UC

PE 110 — OFFICIATING: SPRING SPORTS 3 Units
Regulations and techniques of officiating baseball and softball. Lecture. (Fall) Transfer: CSU, UC

PE 111 — APPLICATION OF SPORTS MEDICINE 3 Units
Prerequisite: Satisfactory completion of PE 108
Practical application of modalities and techniques used in the treatment and care of athletic injuries for the prospective Athletic Trainer. Emphasis on injury recognition, development of conditioning and reconditioning programs, and taping techniques to enable athletes to return to competitive activities. Lecture. (A-F Only) Transfer: CSU, UC

PE 113 — OFFENSIVE/DEFENSIVE SOFTBALL THEORY 1 Unit
Analysis of offensive and defensive techniques, strategies, positions and team play which includes rules and physical and mental training procedures. Two maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU, UC

PE 114 — CROSS COUNTRY CONCEPTS 1 Unit

PE 115 — OFFICIATING: FALL SPORTS 3 Units
Regulations and techniques of officiating football, basketball. (A-F or P/NP). Lecture. Transfer: CSU, UC

PE 116 — FOOTBALL TEAM PLAY CONCEPTS 2 Units
Essential concepts of team building in football. Goal-setting and development of individual roles. Exploration of team communication processes and activation of leadership of the successful football team. Provides both the participant and the future mentor specialized exposure for an in-depth survey of team building in regard to the sport of football. Lecture/Laboratory. Field trips may be required. (A-F or P/NP) (Fall) Transfer: CSU, UC
PE 120—SPORTS AND SOCIETY  
3 Units
Examine sports as a significant aspect of modern culture and a major institution of modern society. Topics that will be analyzed include: gender and sports, the relationship between organized sports and aggression, sports as an economy, and the issues of social class and race in sports. (A-F or P/NP) Transfer: CSU, UC

PE 121—COACHING EFFECTIVENESS  
3 Units
Role of coach in athletics, ethics, leadership and management principles, psycho-social aspects of athlete behavior management, motor learning, physiological systems and physical training theory. Lecture. (A-F or P/NP) Transfer: CSU, UC (A-F Only)

PE 122—ADAPTED PHYSICAL EDUCATION THEORY AND LAB  
3 Units
Common definitions, scope and basic concepts of Adapted Physical Education. A study of specific disabilities, with a primary focus on identification, etiology and implications for physical education. Course includes practical experience in the field. Intended for students interested in pursuing a career in physical therapy, nursing, adapted physical education, gerontology or fields requiring one to work with individuals with disabilities. Lecture/Laboratory. Transfer: CSU, UC (A-F Only)

PE 130—PERSONAL TRAINER HEALTH FITNESS INSTRUCTOR  
3 Units
Recommended for Success: Satisfactory completion of PEC 195, PEC 197, or PEW 192
Basic competency in designing and implementing fitness programs for a healthy population. Features both practical and theoretical instruction as well as case scenario instruction. Emphasis on safe, effective and efficient methods of teaching cardiovascular training, resistance training, flexibility training, and adaptability training for individuals or groups. Covers a broad range of exercise physiology, exercise program design, anatomy of major muscle groups, interval and circuit training, exercise biomechanics, advance lifting techniques, the basics of working with special populations, and exercise progression. Lecture. Maximum one completion. (A-F or P/NP) Transfer: CSU

PE 132—AQUATIC FITNESS & HEALTH INSTRUCTOR  
3 Units
Recommended for Success: Satisfactory completion of PEC 195, PEC 197, or PEW 192
Basic competency in designing and implementing aquatic fitness programs for a healthy population. Features both practical and theoretical instruction as well as case scenario instruction. Emphasis on safe, effective and efficient methods of teaching cardiovascular training, resistance training, flexibility training and personal aquatic exercise. Covers a broad range of exercise physiology, exercise program design, anatomy of major muscle groups, water laws, the basics of working with special populations, and modifications. Field trip may be required. (A-F or P/NP). One completion allowed. Lecture. Transfer: CSU

PE 141—SUPERVISION IN ATHLETIC TRAINING  
2 Units
Policies and procedures, emergency protocols, vital signs, blood borne pathogens, and daily functions that are necessary for the student to work in the Athletic Training Center. Students will develop a plan using decision-making strategies, analysis, and an awareness of the factors related to medical protocols. The students will work in the Athletic Training Center with our athletes and coaches for an in-depth experience related to sports medicine. Field trips may be required. Four maximum completions. Lecture/Laboratory. (A-F Only) Transfer: CSU

PE 194—INTRODUCTION TO WORLD DANCE  
3 Units
Also offered as THETR 194.
A survey of dance and its development as an art form through social, political and cultural context. Investigation of cultural traditions and styles, values, aesthetics and more will be explored. (A-F only) Lecture. Transfer: CSU, UC General Education: (MUC-GE.C1)(CSU-GE: C1) (IGETC: 3A)

PE 349—WORK EXPERIENCE: PHYSICAL EDUCATION  
1-4 Units
Concurrent Enrollment in a minimum of 7 units, which may include Cooperative Vocational Work Experience.
Designed for physical education and health majors who wish to combine classroom experience with an expansion of skills or knowledge acquired at a site of employment or volunteer basis. Work must relate to the student’s area of study. Maximum 4 units may be earned per semester. May be repeated to a maximum of 16 units work experience credit. (Cooperative General Work Experience is included in this maximum.) Also offered during May, June, and July. (A-F Only) Maximum four completions.

PEA 104—ADAPTED STRENGTH DEVELOPMENT  
1 Unit
Recommended for Success: Provide medical verification of disability and recommendation of medical specialist
Development and maintenance of muscular strength for students with physical/medical limitations. Emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. Four maximum completions. Lecture/Laboratory/Other. Transfer: CSU, UC

PEA 106 X, A—FUNCTIONAL WATER EXERCISE  
½, 1 Unit
Recommended for Success: Medical verification of physical or learning disability or motor problems.
A specialized course in physical fitness involving group aquatic exercises which include range of motion, strength, endurance, and flexibility training. Specialized adapted equipment appropriate for limited mobility conditions may be used. (MJC Activities) Transfer: CSU, UC

PEA 107—ADAPTED SWIMMING  
1 Unit
Recommended for Success: Medical verification of physical or learning disability or motor problems.
A specialized course in physical exercise which includes personalized and group swim exercises which include strength, endurance, and flexibility training and instruction in improving and/or modifying swimming skills. (MJC Activities) Transfer: CSU, UC

PEA 108—ADAPTED AQUATICS  
1 Unit
Recommended for Success: Medical verification of physical or learning disability or motor problems.
A specialized course in physical exercise which includes personalized and group aquatic exercises for strength, endurance, and flexibility may which can involve specialized adapted equipment appropriate to one’s disability or injury. (MJC Activities) Transfer: CSU, UC

PEA 116—ADAPTED RUN/WALK  
1 Unit
Recommended for Success: Medical verification of physical or learning disability or motor problems.
Personalized and group exercises that include development of an overall fitness routine involving conditions for walking and/ or running: balance, gait, functional motor control, developmental movement, strength and endurance. Emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. Recommended for students with physical and learning disabilities. Laboratory. Four maximum completions. (MJC Activities) Transfer: CSU, UC

PEA 119—ADAPTED SPORTS  
1 Unit
Recommended for Success: Medical verification of physical or learning disability or motor problems.
Introduces students with a physical and/or developmental disabilities to a variety of sports. Students will safely participate in sports such as, but not limited to, softball, volleyball, tennis, Frisbee, soccer, basketball, and golf. Laboratory. Four maximum completions. (Spring) (MJC Activities) Transfer: CSU, UC

PEA 141—ADAPTED FITNESS  
1 Unit
Recommended for Success: Provide medical verification of physical or learning disability or motor problems.
A specialized course in physical exercise which includes individual and group exercises that include development of an overall fitness routine involving all aspects of body conditioning: balance, flexibility, functional motor control, developmental movement, strength and endurance. There will be an emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC
PEC 102, A—WATER AEROBICS  ½, 1 Unit
Recommended for Success: Basic swimming and water skills
(Participants are required to pay line and shoe charges at bowling alley. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 106X, A—BADMINTON  ½, 1 Unit
Basic skills, rules, strategy, practice in singles and doubles play. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 108, A—DEEP WATER AEROBICS  ½, 1 Unit
Recommended for Success: Basic swimming and water skills
Group aquatic exercises utilizing strength, endurance, flexibility training in deep water which can involve specialized aquatic equipment. (MJC Activities) Transfer: CSU, UC

PEC 111, A—BEGINNING RACQUETBALL  ½, 1 Unit
Fundamentals of racquetball. Participation at local court. Expenses are the responsibility of the student. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 112, A—INTERMEDIATE RACQUETBALL  ½, 1 Unit
Recommended for Success: Satisfactory completion of PEC 111
Intermediate skills and theory. Basic singles and doubles play. Participation at local court. Expenses are the responsibility of the student. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 118, A—BOWLING  ½, 1 Unit
Fundamentals of bowling. Students are required to pay line and shoe charges at bowling alley. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 120X, A—HIP HOP  ½, 1 Unit
Also listed as THETR 170
Fundamental skills of hip hop dance derived from the current dance vernacular and culture. Dance movement education, exploration, and recreation. May be completed up to 4 times. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 122X, A—INTERMEDIATE MODERN DANCE  ½, 1 Unit
Also offered as THETR 186X
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 122X or THETR 186X.
Emphasis on intermediate modern dance technique, intermediate composition, improvisation, partnering, dance history and philosophy. Dance as an art form and as recreation. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 124X, A—ADVANCED MODERN DANCE  ½, 1 Unit
Also offered as THETR 187
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 123X or THETR 186X.
Emphasis on composition, improvisation, expression, dance history and philosophy; an outlet for expressive movement ideas. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 126, A—JAZZ DANCE  ½, 1 Unit
Also offered as THETR 188
Technique of Jazz Dance with explorations into contemporary derivations of jazz. Emphasis is given to technical style of this form, and to the interrelationship of music and movement. Field trips may be required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 128X, A—AEROBICS  ½, 1 Unit
Aerobic movements for improved cardiovascular condition, muscle tone, flexibility, balance, agility, coordination and weight control. Lecture/Laboratory. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

PEC 130X, A—INTERNATIONAL FOLK DANCE  ½, 1 Unit
International folk dance is accessible to the average person in good condition at this introductory level. Dances which originated with people living in or native to various countries/areas, such as Middle East, Balkans, Russia, etc. Dance exploration and recreation. Three maximum completions. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 133X, A—BALLET 1  ½, 1 Unit
Also offered as THETR 189
Fundamental ballet techniques and terminology. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 134X, A—CONTACT IMPROVISATION  ½, 1 Unit
Contact improvisation is an exciting movement art form, exploring the vast potential for movement generated by two or more people, communicating spontaneously through weight, motion and touch. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC
PEC 135 — SPRINGBOARD DIVING  1 Unit
Springboard diving course for students of all ability levels. Workouts will include stretching, strength development, flexibility and coordination exercises, techniques of the approach, hurdle, press, takeoff, flight and entry. Mid-air maneuvers will be identified and practiced on one meter and three meter diving boards as skill levels increase. Basic water safety and related safety issues will be included. Four completions allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

PEC 136 — INDOOR ROCK CLIMBING  1 Unit
Indoor rock climbing class covering climbing techniques, safety equipment, and basic safety skills used by climbers and belayers. Classes will be held at StoneHenge Climbing Gym of Modesto. Facility use fee required. Field trips may be required. Four completions allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

PEC 140X,A — EXERCISE FOR FITNESS  ½, 1 Unit
A course in physical fitness with emphasis on cardiovascular improvement and respiratory efficiency through a variety of physical activities consisting of continuous motion exercises. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 143X,A — BEGINNING GOLF  ½, 1 Unit
Fundamentals of golf. Maximum four completions. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 144X,A — INTERMEDIATE GOLF  ½, 1 Unit
Recommended for Success: PEC 143 or equivalent. Further application of golf fundamentals and rules. Maximum four completions. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 145X,A — ADVANCED GOLF  ½, 1 Unit
Recommended for Success: PEC 144 or equivalent. Golf course play and skills improvement on individual basis. Maximum four completions. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 147X,A — GYMNASTICS  ½, 1 Unit
Tumbling, floor exercise, stunts, and acrobatic skills are taught and practiced in progression and combined for skill development. (A-F or P/NP) Four completions allowed. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 148X,A — YOGA FOR BETTER HEALTH  ½, 1 Unit
Fitness class using Yoga postures, breathing, and relaxation techniques to increase flexibility and strength, balance and coordination. Appropriate for all ages and learning abilities. Lecture/Laboratory. (A-F or P/NP) Four completions allowed. (MJC Activities) Transfer: CSU, UC

PEC 150X,A — INTERMEDIATE YOGA FOR BETTER HEALTH  ½, 1 Unit
Recommended for Success: PEC 148 or prior experience in yoga. Intermediate class using yoga postures, breathing, and relaxation techniques to increase flexibility, strength, balance and coordination. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 157 — ADVANCED JUDO  1 Unit
Recommended for Success: Before enrolling in this course, students are strongly advised to complete PEC 167A or demonstrate basic judo skills and competencies along with a knowledge and understanding of judo concepts, terminology, etiquette, and methods of scoring, timekeeping, and elimination systems. Instruction in skills, techniques, and knowledge necessary for student to safely and effectively participate in advanced judo for personal and competitive purposes. (A-F or P/NP) Laboratory. Four completions allowed. (MJC Activities) Transfer: CSU, UC

PEC 159 — SPIRIT LEADERSHIP TRAINING  3 Units
Instruction, training and development of a corps of spirit leaders to promote enthusiasm for school athletic activities. (MJC Activities) Transfer: CSU, UC

PEC 164,A — SELF DEFENSE  ½, 1 Unit
A practical course in self defense. Practice of various basic techniques and principles of balance, leverage, and momentum. Discussion of how to avoid threatening situations in the home or on the street. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 165 X,A — JUDO  ½, 1 Unit
Instruction and practice in the basic skills of the sport of Judo. Course will cover the terminology, etiquette along with throwing and grappling techniques, with integration of various Katas (forms) and Randori (free exercise). May be completed up to 4 times. (A-F or P/NP). (MJC Activities) Transfer: CSU, UC

PEC 166X,A — INTERMEDIATE JUDO  ½, 1 Unit
Advisories: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 165. Instruction and practice in the intermediate skills of the sport of Judo. Course will cover the terminology, etiquette along with throwing and grappling techniques, with integration of various Katas (forms) and Randori (free exercise). May be completed up to 4 times. Lecture. Laboratory. (A-F and P/NP) Transfer: CSU, UC. General Education: (MJC Activities)

PEC 168,A — BEGINNING SWIMMING  ½, 1 Unit
Recommended for Success: Must be comfortable in shallow water. Class conducted in a shallow pool. Basic skills of floating, breathing, kicking, pulling, using arms and legs. Lecture/Laboratory. (A-F or P/NP) Four completions allowed. (MJC Activities) Transfer: CSU, UC

PEC 169 X,A — INTERMEDIATE SWIMMING  ½, 1 Unit
Recommended for Success: Satisfactory completion of PEC 168A. Continued development in basic stroke techniques and endurance for intermediate swimming. May be completed up to 4 times. (A-F or P/NP). Applicable to the Associate Degree. (MJC Activities) Transfer: CSU, UC.

PEC 170X,A — ADVANCED SWIMMING  ½, 1 Unit
Recommended for Success: Students are strongly advised to satisfactorily complete PEC 168. Continued development in stroke techniques, and workout knowledge for advanced swimming. Four completions allowed. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 171,A — SWIM FOR FITNESS  ½, 1 Unit
Recommended for Success: Ability to handle self in deep water. To meet individual needs in basic stroke techniques and endurance swimming for intermediate and/or advanced swimmers. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 172 — LIFEGUARD TRAINING  1 Unit
Prerequisite: Pass swimming pre-test, be at least 15 years old on the first day of class. Preventive lifeguarding, learning how to recognize specific characteristic behaviors of patrons at an aquatic facility, facility emergency planning. First Aid and CPR for the Professional Rescuer included. Successful course completion results in American Red Cross certification in lifeguard training, CPR and first aid. (A-F or P/NP). Four completions allowed. Materials fee required. (MJC Activities) Transfer: CSU, UC

PEC 174X,A — TABLE TENNIS  ½, 1 Unit
Instruction in basic skills, rules, strategy, practice in singles and doubles play, plus supplemental films, video tapes and class competition. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 175X,A — BEGINNING TENNIS  ½, 1 Unit
Fundamental skills in tennis. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC
PEC 176X,A—INTERMEDIATE TENNIS ½,1 Unit
Recommended for Success: Before enrolling in this course students are strongly advised to satisfactorily complete PEC 175X.A.
Development of net and backcourt skills and strategies, net play, volleys, and proficiency in rules, terminology, and etiquette. Four completions allowed. Lecture/Laboratory. (MJC Activities) (A-F or P/NP) Transfer: CSU, UC

PEC 177,A—ADVANCED TENNIS ½,1 Unit
Recommended for Success: Before enrolling in this course students are strongly advised to satisfactorily complete PEC 176 or equivalent.
Skills and strategy of competitive tennis, including tournaments, and ladder play. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 178,A—TOURNAMENT TENNIS ½,1 Unit
Recommended for Success: Before enrolling in this course students are strongly advised to satisfactorily complete PEC 177A.
Designed for the expert tennis player and includes intraclass competition. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 179,A—TRACK AND FIELD ½,1 Unit
Generalized training and techniques for track and field. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 182,A—TRAINING FOR DISTANCE RUNNING ½,1 Unit
Become better prepared for endurance-distance running with organized training runs. Information on creating an effective training program, nutrition, weight training and cross training. Field trips may be required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 183,A—VOLLEYBALL ½,1 Unit
Fundamentals of volleyball. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 184,A—POWER VOLLEYBALL ½,1 Unit
Recommended for Success: PEC 183 or equivalent.
Power volleyball for team play. Advanced offensive and defensive strategy and game skills. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 185X,A—HIKING 1 ½,1 Units
This course emphasizes using and creating familiarity with trails within this area (a parameter of no more than two hours by car). Lectures will also cover the use of compass and map, various hiking themes, hiking activities, hiking safety, and awareness of the unique aspects of areas to be hiked. Lecture/Laboratory. Four maximum completions. Field trips required. (MJC Activities) Transfer: CSU, UC

PEC 186,A—INTERMEDIATE VOLLEYBALL ½,1 Unit
Recommended for Success: Satisfactory completion of PEC 183
Intermediate skills and theory. Intermediate offensive and defensive strategy. Lecture/Laboratory. (A-F Only) Four completions allowed. (MJC Activities) Transfer: CSU, UC

PEC 187,A—PIILATES FOR FITNESS ½,1 Unit
A fitness class that utilizes the Pilates exercise system focused on improving flexibility and strength for the total body through a series of controlled movements. Pilates exercises can improve posture, alignment, and balance. Movements are designed to tone muscles without putting stress on the spine. For people of all ages and fitness levels. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 190X,A—ADVANCED WATER POLO ½,1 Unit
Recommended for Success: Satisfactory completion of PEC 189 or equivalent.
Advanced team play and game strategy in water polo for recreation exercise. Four completions allowed. Lecture/Laboratory. (A-F or P/NP) (Summer) (MJC Activities) Transfer: CSU, UC

PEC 191—POWERLIFTING 1 Unit
Prerequisite: Satisfactory completion of PEC 195 or PEW 192.
Advanced techniques of effective strength training in a supervised program with an emphasis on traditional powerlifting using free weights and supplemental exercise programs. (P/NP). May be completed up to 4 times. (MJC Activities) Transfer: CSU, UC

PEC 195—WEIGHT TRAINING 1 Unit
Principles and procedures of effective strength training techniques in a supervised weight training program. Lecture/Laboratory. (P/NP only) Four completions allowed. (MJC Activities) Transfer: CSU, UC

PEC 197—ADVANCED WEIGHT TRAINING 1 Unit
Recommended for Success: Satisfactory completion of PEC 195
Strength training in a supervised weight training program with emphasis on olympic lifts with free weights. May be completed up to 4 times. (P/NP Only). Applicable to the Associate Degree. (MJC Activities) Transfer: CSU, UC

PEC 198,A—SPORTS INJURY MANAGEMENT ½,1 Unit
Exercises designed to modify personal attitudes and actions toward health and physical activity. Exercise modalities may include, but are not limited to; Pilates, weight training, aerobics, walking/jogging, and yoga. Four completions allowed Non-graded. Unlimited repeats. Lecture/Laboratory.

PEC 825—ADVANCED BASKETBALL TEAM PLAY
An introduction to advanced concepts and skills of collegiate basketball play for high school students. Laboratory. (Non-graded) Summer.

PEC 841—FITNESS FOR LIFE
Exercises designed to modify personal attitudes and actions toward health and physical activity. Exercise modalities may include, but are not limited to; Pilates, weight training, aerobics, walking/jogging, and yoga. Four completions allowed Non-graded. Unlimited repeats. Lecture/Laboratory.

PEM 108X, A—BASEBALL ½,1 Unit
Fundamentals and theory of baseball. Lecture/Laboratory. Four completions allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC

PEC 111X,A—BASEBALL - TEAM PLAY CONCEPTS ½,1 Unit
Team play approach to game of baseball. Lecture/Laboratory. (MJC Activities) Four completions allowed. (MJC Activities) (A-F or P/NP) Transfer: CSU, UC

PEC 112X,A—BEGINNING BASKETBALL ½,1 Unit
Fundamentals of basketball. Four completions allowed Lecture/Laboratory. (MJC Activities) (A-F or P/NP) Transfer: CSU, UC

PEC 113X,A—INTERMEDIATE BASKETBALL ½,1 Unit
Intermediate skills and theory. Basic team play concepts. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 114X,A—ADVANCED BASKETBALL ½,1 Unit
Advanced skills, theory and concepts of competitive team play. May be completed four times. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 140X, A—TOUCH FOOTBALL AND KANAKI ½,1 Unit
Discussion and practical applications of rules and strategy, with emphasis on individual movements found in offensive and defensive touch football and kanaki. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 141X,A—ADVANCED TOUCH FOOTBALL ½,1 Unit
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEM 140A.
Conditioning, skills, rules, and strategies with emphasis on the passing game to prepare for participation in advanced football. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

PEC 162X,A—SOCCER ½,1 Unit
Practical application of basic offensive and defensive tactics; individual and team skills; strategy and rules review; scrimmages. (A-F or P/NP) Applicable to the Associate Degree. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC
PEM 196X, A—ADVANCED WRESTLING  ½, 1 Unit
Advanced wrestling and training methods, and the philosophy behind winning at advanced levels of competition. Four completions allowed. (A-F or P/NP). Lecture/Laboratory. (MJC Activities)
Transfer: CSL, UC

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<tr>
<th>PEVM</th>
<th>(Physical Education: Varsity Men's Activities)</th>
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<tbody>
<tr>
<td>Courses listed below offer advanced instruction and intensive training in sports fundamentals to develop teams for intercollegiate competition. A varsity activity may be taken a maximum of four times. Participation in intercollegiate sports requires concurrent enrollment in not less than 12 units of work, nine of which must be in courses counting toward the associate degree, remediation, transfer and/or certification. Special medical examinations are required for students participating in competitive sports. Verification of insurance is also required. Participation in a second sport or a second year of a sport requires a 2.0 grade point average and 24 units passed.</td>
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<tr>
<td>PEVM 100—VARSITY BASEBALL</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training and competition in intercollegiate baseball. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 105—MEN'S VARSITY BASKETBALL (Fall)</td>
<td>3 Units</td>
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<td>Recommended for Success: PE 101</td>
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<tr>
<td>Instruction, training and competition in intercollegiate basketball. Laboratory/Other. (Fall) (MJC Activities) Four completions allowed. (A-F Only) General Education (Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 106—MEN'S VARSITY BASKETBALL (Spring)</td>
<td>1½ Unit</td>
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<tr>
<td>Recommended for Success: PEVM 105</td>
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<tr>
<td>Continued instruction, training and competition in intercollegiate basketball. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 110—MEN’S VARSITY CROSS-COUNTRY</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training and competition in intercollegiate cross country running. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC</td>
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<td>PEVM 115—MEN’S VARSITY FOOTBALL</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training, and competition in intercollegiate football. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 120—MEN’S VARSITY GOLF</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training, and competition in intercollegiate golf. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 122—MEN’S VARSITY SOCCER</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training, and competition in intercollegiate soccer. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 125—MEN’S VARSITY SWIMMING AND DIVING</td>
<td>3 Units</td>
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<tr>
<td>Recommended for Success: Concurrent enrollment in PEC 170, 195</td>
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<tr>
<td>Instruction, training, and competition in intercollegiate swimming and diving. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>PEVM 130—MEN’S VARSITY TENNIS</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training, and competition in intercollegiate tennis. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC</td>
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<th>PEVW</th>
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<tr>
<td>Courses listed below offer advanced instruction and intensive training in sports fundamentals to develop teams for intercollegiate competition. A varsity activity may be taken a maximum of four times. Participation in intercollegiate sports requires concurrent enrollment in not less than 12 units of work, nine of which must be in courses counting toward the associate degree, remediation, transfer, and/or certification. Special medical examinations are required for students participating in competitive sports. Insurance is also required. Participation in a second sport or a second year of a sport requires a 2.0 grade point average and 24 units passed.</td>
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<tr>
<td>PEVW 100—WOMEN’S VARSITY BASKETBALL (Fall)</td>
<td>3 Units</td>
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<tr>
<td>Instruction, training and competition in intercollegiate basketball. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC</td>
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PEVW 101—WOMEN’S VARSITY BASKETBALL (Spring) 1½ Units
Continued instruction, training and competition in intercollegiate basketball. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC

PEVW 103—WOMEN’S VARSITY CROSS COUNTRY 3 Units
Instruction, training, and competition in intercollegiate cross country running. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC

PEVW 115—WOMEN’S VARSITY GOLF 3 Units
Instruction, practice, and competition in intercollegiate golf. Four completions allowed. Laboratory. (MJC Activities) Transfer: CSU, UC

PEVW 120—WOMEN’S VARSITY SOFTBALL 3 Units
Instruction, training, and competition in intercollegiate softball. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC

PEVW 123—WOMEN’S VARSITY SOCCER 3 Units
Instruction, training and competition in intercollegiate soccer. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC

PEVW 125—WOMEN’S VARSITY SWIMMING AND DIVING 3 Units
Instruction, training, and intercollegiate competition in swimming and diving. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC

PEVW 130—WOMEN’S VARSITY TENNIS 3 Units
Instruction, training, and competition in intercollegiate tennis. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC

PEVW 135—WOMEN’S VARSITY TRACK AND FIELD 3 Units
Instruction, training, and competition in intercollegiate track and field events. Laboratory/Other. (Spring) (MJC Activities) Transfer: CSU, UC

PEVW 140—WOMEN’S VARSITY VOLLEYBALL 3 Units
Instruction, training, and competition in intercollegiate volleyball. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC

PEVW 145—WOMEN’S VARSITY WATER POLO 3 Units
Instruction, training and competition in intercollegiate water polo. Four maximum completions. Laboratory/Other. (Fall) (MJC Activities) Transfer: CSU, UC

PEW 180X, A—WOMEN’S SOFTBALL ½, 1 Unit
Discussion and practical application of rules, strategy, fielding, throwing, base running, team offense, and team defense used in fastpitch softball. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. Not offered every semester. (MJC Activities) Transfer: CSU, UC

PEW 192—WOMEN’S WEIGHT TRAINING 1 Unit
Introduction to individual opportunities in development of power, strength, flexibility and/or endurance through weight training. (P/NP only). (MJC Activities) Transfer: CSU, UC

Pharmacy Technician
Courses offered through Community Education (209) 575-6063

PHILO (Philosophy)

PHILO 101—PHILOSOPHY 3 Units
A careful and critical examination of some of the "Great Questions" philosophers have pursued from ancient times to the present. Some of these include: What is human nature? What is real? Do we have free will? Does God exist? What can we know? How should we act? What is the source of evil? And, what is the nature of truth? (A-F or P/NP) Lecture. Transfer: CSU, UC (CC PHILO 1) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

PHILO 103—SYMBOLIC LOGIC 3 Units
Also offered as CMPSC 103.
An introduction to modern deductive logic, includes sentential and predicate logic with identity theory and definite descriptions. Lecture. Transfer: CSU, UC General Education: (MJC-GE: D2) (CSU-GE: A3)

PHILO 105—REASONING 3 Units
Prerequisite: Satisfactory completion of ENGL 101.
An examination of logic and its practical application in everyday situations, including problem solving, advertisement discrimination, political evaluation and argumentation. Lecture. Transfer: CSU, UC General Education: (MJC-GE: D2) (CSU-GE: A3) (IGETC: 1B)

PHILO 107—PHILOSOPHY OF SCIENCE 3 Units
Prerequisite: Satisfactory completion of ENGL 101.
Systematic study of the methods of scientific inquiry. Application of critical thinking through philosophical analysis of scientific methodology. Significant emphasis on essay writing in developing analytic skills. For both science and non-science majors. Lecture. Transfer: CSU, UC General Education: (MJC-GE: D2) (CSU-GE: A3) (IGETC: 1B)

PHILO 111—ETHICS: THEORY AND APPLICATION 3 Units
Systematic study of reflective choice, standards of right and wrong by which it may be guided and attainable goods toward which it may be directed. Readings on concepts of good, duty, egoism, altruism, freedom, personal and social responsibility. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

PHILO 113—PHILOSOPHY OF ART 3 Units
An examination of the central features of art as well as alternative accounts of art and aesthetic experience including discussions of beauty, representation, and truth. Field trips may be required. (A-F or P/NP) Transfer: CSU General Education: (MJC-GE:C)(CSU-GE: C2)(IGETC:3B)

PHILO 115—RELIGION: A PHILOSOPHICAL AND COMPARATIVE INQUIRY 3 Units
Introduction to the philosophical problems of religion and a comparative analysis of religious traditions and spiritual practices. Topics include the nature and existence of God, faith and reason, religious knowledge, language and experience in human life. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC HUMAN/PHILO 4) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)
PHILO 120—HISTORY OF PHILOSOPHY: ANCIENT  
Western ideas and philosophies from ancient Greece to the 15th century, with a consideration of prominent Eastern philosophies. The primary focus is on Greek and Roman philosophy, and the development of Christian philosophy through the middle ages. Some of the topics include free will/ determinism, the nature of existence, being, definition and logic. (A-F or P/NP). Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

PHILO 121—HISTORY OF PHILOSOPHY: MODERN  
Western ideas and philosophers in the 17th and 18th centuries, with a consideration of the rise of modern science, rationalist and empiricist philosophies, and the critical and transcendental philosophy of Kant (A-F and P/NP). Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

PHILO 123—TWENTIETH CENTURY PHILOSOPHY  

PHILO 130—POLITICAL THEORY  
A study of social and political thought using classical and contemporary writings, with emphasis on current issues. Ideologies discussed include democracy, socialism, capitalism, communism, fascism, and anarchism. (A-F or P/NP). Lecture. Transfer: CSU, UC General Education: (CSU-GE: B3) (IGETC: 4)

PHILO 135 —ENVIRONMENTAL ETHICS  
How ought we to relate to the rest of nature? What, if anything, is the value of wilderness and wild animals? Are we morally bound to use technology in an ecologically responsible manner? Course will address questions and issues such as these that arise when considering the relationship between human beings and the environment. Topics include animal rights, land use policy, sustainability, bioengineering, climate change, environmental justice. Theoretical approaches include deep ecology, anthropocentrism, ecofeminism, and pragmatism. (A-F or P/NP). Lecture. Transfer: CSU, UC General Education: (MJC-GE-C)

PHILO 140—PHILOSOPHY AND FILM  
An introduction to philosophical problems and reasoning through an analysis of films. Topics discussed include philosophy of life and existence, political ideologies, the nature of aesthetic experience, and theories of film. Field trips may be required. Lecture/Laboratory Transfer: CSU, UC (IGETC: 3B) General Education: (MJC-GE: C) (CSU-GE: C2)

PHILO 164—PHYSICAL SCIENCE ENVIRONMENTAL LABORATORY  
Laboratory and practical experience in the physical sciences. Emphasis on measuring techniques, data analysis, and the scientific method. (A-F or P/NP). Laboratory. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B3)

PHYS (Physics)  

PHYS 101—GENERAL PHYSICS: MECHANICS  
Introduction to calculus-based physics: linear, rotational, and oscillatory mechanics with computer applications. Field trips may be required. Lecture/Laboratory/Discussion. Materials fee may be required. (Spring) Transfer: CSU, UC (CC PHYS 5A) General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A)

PHYS 102—GENERAL PHYSICS: WAVES, THERMODYNAMICS, AND OPTICS  
Continuation of calculus-based physics: thermodynamics, wave motion, acoustics, and optics. Field trips may be required. Lecture/Laboratory/Discussion. Materials fee may be required. (Fall) Transfer: CSU, UC General Education: (CSU-GE: B1, B3) (MJC-GE: C) (IGETC: 5A)

PHYS 103—GENERAL PHYSICS: ELECTRICITY, MAGNETISM & MODERN PHYSICS  
Continuation of calculus-based Physics 101, electricity, magnetism, and modern physics. Field trips may be required. Lecture/Laboratory/Discussion. Materials fee may be required. (Spring) Transfer: CSU, UC (CC PHYS 5B) General Education: (CSU-GE: B1, B3) (IGETC: 5A)

PHYS 142—MECHANICS, HEAT AND WAVES  
Continuation of Physics 141, including electricity, magnetism, and atomic structure. Field trips may be required. Lecture/Laboratory/Discussion. One completion allowed. (A-F or P/NP). Transfer: CSU, UC (CC PHYS 4A) General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A)

PHYS 143—ELECTRICITY, MAGNETISM, OPTICS, ATOMIC AND NUCLEAR STRUCTURE  
Continuation of Physics 142, including electricity, magnetism, light and atomic structure. Field trips may be required. Lecture/Laboratory/Discussion. One completion allowed. Materials fee required. Transfer: CSU, UC (CC PHYS 4B) General Education: (CSU-GE: B1, B3) (IGETC: 5A)

PHYS 160—DESCRIPTIVE INTRODUCTION TO PHYSICS  
Survey of selected topics in physical inquiry to include mechanics, wave motion, thermodynamics, electromagnetism, and modern physics. Physical theory is explored on a conceptual level with emphasis placed on applying physical principles to everyday phenomena. (A-F or P/NP). Lecture. Transfer: CSU, UC (CC PHYS 1) General Education: (MJC-GE: A) (CSU-GE: B1) (IGETC: 5A)

PHYS 164—PHYSICS ENVIRONMENTAL LABORATORY  
Co-requisite: Concurrent enrollment in or satisfactory completion of PHYS 160. Laboratory and practical experience in physics. Emphasis on measuring techniques, data analysis, and the scientific method. (A-F or P/NP). Laboratory. Materials fee may be required. Transfer: CSU, UC General Education: (MJC-GE: A) (CSU-GE: B3)

Phlebotomy  
Courses offered through MJC Community Education (209) 575-6063
PLSC 255—PLANT PROPAGATION/PRODUCTION 3 Units

Pruning of deciduous fruits, nuts and vines. Care and maintenance of tools and equipment. Proper
pruning procedures on local fruit crops. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

PLSC 230—FRUIT SCIENCE 3 Units

Study of local fruit crop diseases, their economic importance, identification, life cycles, host and
plant relationships, and methods of control. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

PLSC 241—VITICULTURE 3 Units

Introduction to grape production practices with emphasis on operations and activities associated
with the production of grapes and wine. Study of soil and climate relationships, and the relationship
between the grapevine and its environment. Field trips required. Laboratory. Also offered as EHS 225.

PLSC 250—PLANT NUTRITION AND FERTILIZER 3 Units

An overview of plant nutrition principles in order to understand fertilizers, amendments, their uses,
value, application, and relationship to soils and crops grown in this area. Deficiency symptoms,
phosphate and potassium test results, and the effect of soil nutrient levels and maintenance of
crop growth. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU, UC

PLSC 255—PLANT PEST CONTROL 3 Units

Study of common insect pests and diseases, their economic importance, identification, life cycles, host
and habitat relationships, and methods of control. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

PLSC 260—PLANT DISEASE CONTROL 3 Units

Study of crop plants and their diseases, their economic importance, identification, life cycles, host
and habitat relationships, and methods of control. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

PLSC 287—INTEGRATED PEST MANAGEMENT 1 Unit

Current topics and discussion on pest management, designed to satisfy Department of
Pesticide Regulation requirements for certified pest control applicator's continuing education. Field trips
may be required. Unlimited completions. Lecture. (A-F Only) Transfer: CSU

PLSC 385—PRUNING 1 Unit

Pruning of deciduous fruits, nuts and vines. Care and maintenance of tools and equipment. Proper
irrigation, fertilization, and insect control also included. Field trips required. Lecture/Laboratory. Saturday labs. (A-F Only)
POLSC - PSYCH

POLSC 101—AMERICAN POLITICS 3 Units
Introduction to United States politics emphasizing the essential institutions, groups, beliefs, behaviors and processes that comprise the American political system at the national, state, and local levels. Special attention to rights and obligations of citizenship. Lecture. Transfer: CSU, UC (TSU POLSC 110) General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 102—THE CONSTITUTION AND THE RIGHTS OF AMERICANS 3 Units
Introduction to U.S. constitutional government emphasizing the principles and problems of a constitutional system, governmental powers and sources of power at the national, state and local levels. Special emphasis on the role of the courts and the rights and responsibilities of democratic citizenship, including units on racial and sexual discrimination, the rights of the accused, privacy, political participation, and freedom of expression and religion. Special attention to current constitutional problems at the national and state levels. Lecture. (A-F and P/NP) Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 110—INTERNATIONAL RELATIONS 3 Units
Introduction to principles and practices of international politics emphasizing problems of war and peace, foreign policies of major powers, problems of developing countries. Transfer: CSU, UC (CC POLSC 14) General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 111—WAR AND PEACE: FROM LENIN TO AL QAEDA 3 Units
Formerly listed as “War and Peace in the Twentieth Century” Survey of major events and personalities in the history of international politics since 1914. Topics include World War I and II, the Russian Revolution, key personalities - Lenin, Stalin, Churchill, Mussolini; the Cold War; rise of communism in Asia; revolution in nuclear weapons and the third world; collapse of the Soviet Union, the post-cold war period. (A-F or P/NP). Approved for online instruction. Transfer: CSU, UC General Education: (CSU-GE: DB) (IGETC: 4H) (MJC-GE: B)

POLSC 120—CALIFORNIA POLITICS AND PROBLEMS 3 Units
Analysis of government institutions, politics, issues and political behavior in California in constitutional, social, economic and cultural perspective. Included are studies of issues confronted by U.S. and California state, county, city and regional governments including political representation, resources and energy, land use and planning, population growth, poverty, education, criminal justice, pollution, budgets and taxation. Special attention to the role and responsibilities of citizenship. One day field trip to State Capital may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 130—POLITICAL THEORY 3 Units
Studies major political theorists and their analysis of political concepts, including democracy, freedom, justice, power, and political leadership. Investigates how political theory is practically relevant and connected to current political issues. (A-F or P/NP) Transfer: CSU, UC General Education: (CSU-GE: DB) (IGETC: 4H)

POLSC 131—AMERICAN POLITICAL THOUGHT 3 Units
Examines American political thought and culture from the European discovery of the New World to the Civil War. Detailed study of the writings of the Puntans, Jefferson, Madison, Frederich Douglas, Sarah Grimke, Thoreau, Melville, Lincoln, and others. (A-F or P/NP) Approved for online and hybrid instruction. Applicable to the Associate Degree. One completion allowed. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 140—COMPARATIVE POLITICS 3 Units
Recommended for political science majors.
Comparative survey of major totalitarian, authoritarian and democratic political systems. Emphasis on Great Britain, France, Germany, Russia, People's Republic of China, Japan and selected Third World countries. Participation in Model United Nations may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 145—THIRD WORLD IN INTERNATIONAL POLITICS 3 Units
Problems and future prospects for third world nations: focus on political, economic, and social development; ethnicity and ethnic conflict, civil wars; role of the developed world and international institutions in aiding third world countries. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: DB) (IGETC: 4)

POLSC 151—WOMEN AND POLITICS 3 Units
The status and role of women in American politics from philosophical, empirical, and historical perspectives. The unique place of women in American political history, public policy development, the law, and as political leaders. Women in the international political arena, including leaders and public policy issues. Lecture. Field trips may be required. Transfer: CSU, UC General Education: (MJC-GE: B) (CSU-GE: D4, DB) (IGETC: 4)

PORTG 52—INTRODUCTION TO PRACTICAL PORTUGUESE 2 3 Units
Recommended for Success: PORTG 51.
PORTG 51—INTRODUCTION TO PRACTICAL PORTUGUESE 1 3 Units
Basic conversational Portuguese. Emphasis on the development of conversational skills rather than on reading and writing. Designed for students who need to speak Portuguese in their work or who wish to refresh their Portuguese-language background, or who need preparation for PORTG 101. Lecture/Laboratory. (Fall) General Education: (MJC-GE: C)

PORTG 195—INTERNSHIP IN POLITICAL SCIENCE 1 Unit
Corequisite: Concurrent enrollment in POLSC 196. Supervised internship in a federal, state, or local government office; court; or political organization. Maximum of 6 units in any combination of POLSC 196A, 196B, and 196C. May be completed up to 4 times (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU

PORTG 196A,B,C—INTERNSHIP IN POLITICAL SCIENCE 1,2,3 Units
Corequisite: Concurrent enrollment in POLSC 195. Supervised internship in a federal, state, or local government office; court; or political organization. Maximum of 6 units in any combination of POLSC 196A, 196B, and 196C. May be completed up to 4 times (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU

PSYCH 51—PSYCHOLOGY IN EVERYDAY LIFE 3 Units
Recommended for Success: Satisfactory completion of ENGL 49.
Principles of human behavior and personality development and their application to today's world, including personal and job-related problem solving skills. Lecture. Applicable to the Associate Degree. (A-F and P/NP) General Education: (MJC-GE: B)
PSYCH 101 — GENERAL PSYCHOLOGY  3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to meet the eligibility requirements for ENGL 101.
Introduction to the areas, concepts, methods and facts of the science of psychology as they relate to the understanding of behavior. Lecture. (A-F and P/NP) Transfer: CSU, UC (CC PSYCH 1) General Education: (MJC-GE: B) (CSU-GE: D9) (IGETC: 4)

PSYCH 102 — RESEARCH METHODS  3 Units
Prerequisite: Satisfactory completion of PSYCH 101
Recommended for Success: Before enrolling in this course, students are strongly advised to complete ENGL 101.
An introductory examination and application of various research methods used by psychologists in order to describe, predict, and explain behavior. Field trips may be required. Lecture: Transfer: CSU, UC

PSYCH 103 — INTRODUCTION TO NEUROSCIENCE  3 Unit(s)
Prerequisite: Satisfactory completion of PSYCH 101
Also offered as PHYSO 103
Introduction to the biological basis of behavior. Emphasis on divisions of the nervous system, neuroanatomy, neurophysiology, psychopharmacology as applied to the understanding of perceptual processes, psychoactive drugs, movement, regulation of hunger and thirst, sexual behavior, sleep, learning and memory, language, emotion, reward and stress, psychopathology. Appropriate for all students interested in the behavioral and biological sciences. (A-F and P/NP) Lecture: Transfer: CSU, UC General Education: (MJC-GE:A)(CSU-GE:B2) (IGETC: 5B)

PSYCH 104 — SOCIAL PSYCHOLOGY  3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PSYCH 101 and to be eligible for ENGL 101.
Study of how individuals affect and are affected by other people in their interaction with one another. The relationship between social behavior and internal processes (attitudes, beliefs, self-concept) will also be examined. (A-F or P/NP) Lecture: Transfer: CSU, UC General Education: (MJC-GE:B,E) (CSU-GE: E) (IGETC: 4)

PSYCH 105 — ABNORMAL PSYCHOLOGY  3 Units
Recommended for Success: PSYCH 101
An examination of the broad questions of normality in the context of biological, psychological, sociological, and cultural factors; including major theoretical, diagnostic and treatment approaches. Field trips required. Lecture: Transfer: CSU, UC (MJC-GE: B)(CSU-GE: D9)(IGETC:4)

PSYCH 110 — HUMAN SEXUALITIES  3 Units
Study of human sexualities from a biopsychosocial perspective. The intersections of biology, culture, ethnicity, race, social class, sexual orientation and gender as they relate to sexualities will be explored throughout the course. (A-F and P/NP) Lecture: Transfer: CSU, UC (CC PSYCH 5) General Education: (MJC-GE: E) (CSU-GE: E) (IGETC: 4)

PSYCH 111 — PSYCHOLOGY OF GENDER  3 Units
Recommended for Success: PSYCH 101
A survey of various factors in the development of gender identity and gender roles, including psychological, sociological, biological and cultural influences. Lecture. Field trips may be required. Transfer: CSU, UC (MJC-GE: B)(CSU-GE: D4, D9)(IGETC:4)

PSYCH 118 — PHARMACOLOGY OF ABUSED SUBSTANCES  3 Units
Also offered as HUMSR 118.
Recommended for Success: HUMSR 116 or PSYCH 101.
An introduction to psychopharmacology and the process of drug addiction. Topics include classification of abused and psychotherapeutic drugs, basic principles of pharmacology, behavioral and psychological effects of drugs, major neurotransmitter systems and how they are influenced by drugs. Lecture. Transfer: CSU

PSYCH 130 — PERSONAL ADJUSTMENT  3 Units
The study of personal growth and adjustment. Includes discussion of personality, development, interpersonal relationships, stress management, work, and other concerns of individuals in society. Lecture. (A-F or P/NP) Transfer: CSU (CC PSYCH 30) General Education: (MJC-GE: E) (CSU-GE: E)

PSYCH 141 — HUMAN LIFESPAN  3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PSYCH 101 and meet the eligibility requirements for ENGL 101.
Introduction to the scientific study of human development from conception through adulthood. Examines interplay of biological, psychological, social and cultural forces on the developing human being. (A-F or P/NP) Lecture: Transfer: CSU, UC (CC PSYCH10) General Education: (MJC-GE: E) (CSU-GE: E) (IGETC: 4)

RATV 101 — VOICE AND ARTICULATION  3 Units
Formerly listed as "Basic Voice and Articulation"
Also offered as SPOM 101 and THEAT 101.
Training program in basic voice and articulation. Emphasis on critical listening, self-analysis and self-improvement in tone production and control, voice quality, articulation and pronunciation. Introduction to the International Phonetic Alphabet. This is not a class for persons with a major speech or language delay or disorder. (A-F or P/NP) One completion allowed. Lecture: Transfer: CSU, UC (CC DRAMA/SPOM 18)

RATV 131 — INTRODUCTION TO RADIO PRODUCTION  3 Units
Formerly listed as "RATV 131 - Radio Control Room and Studio Production"
Theory and operation of broadcast audio control room and studio equipment. Basic planning and production techniques for radio programs, station promotions, commercial and public service announcements. Field trips may be required. Lecture/Laboratory. One completion allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU

RATV 132 — ADVANCED RADIO PRODUCTION 1  4 Units
Prerequisite: RATV 131
Students operate a limited power radio station incorporating standard broadcast procedures and practices and exercising their skills in the production of commercials and public service announcements, promotional announcements, news, and remote broadcasts. Students may produce programs for community commercial stations. Field trips may be required. Two maximum completions. Lecture/Laboratory. Transfer: CSU

RATV 133 — ADVANCED RADIO PRODUCTION 2  4 Units
Prerequisite: RATV 132
Continuation of RATV 132. Refinement of skills utilizing digital recording equipment. Students will prepare an audition tape for entry level in the job market. Outside speakers from the broadcast industry will be featured. Field trips may be required. Two maximum completions. Lecture/Laboratory. Transfer: CSU

RATV 134 — TELEVISION STUDIO PRODUCTION  3 Units
Introduction to television production techniques. This course offers and exciting blend of theory, critical and practical work, with access to the college TV studio facilities. Students will work in teams to produce their own programs and have many hands-on and skill-building opportunities in the areas of creative concept and script development, technical operation of television studio equipment art direction and set design, multi-camera directing and performing in front of a camera. Lecture/Laboratory. Materials fee required. (MJC Activities) Transfer: CSU
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**RATV - READ**

**RATV 135—ADVANCED TELEVISION PRODUCTION 1 3 Units**
Recommended for Success: RATV 134, 142.
Practical applications in single and multiple camera television production. Creative use of camera, sound, editing, and production planning. Students will produce, direct, and edit individual features that will be incorporated into a half hour television program. This class will provide expanded responsibilities in producing, directing, and operating video and audio equipment in remote and studio productions. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU

**RATV 136—ADVANCED TELEVISION PRODUCTION 2 3 Units**
Continuation of RATV 135. Development of leadership skills, directing techniques, and the producing process for the television industry. Field trips may be required. Two maximum completions. Lecture/Laboratory. Materials fee required. Transfer: CSU

**RATV 137—RADIO PROGRAMMING AND BROADCAST 3 Units**
Formerly listed as: “RATV 137 - Radio and Television Announcing” Recommended for Success: “RATV 137 - Radio and Television Announcing” Performance for the electronic media. Includes announcing, newscasting, interview, and narration. Practical development of radio and television announcing skills through practice and evaluation. Maximum one completion. Field trips may be required. Lecture/Laboratory. Transfer: CSU

**RATV 138—WRITING FOR RADIO AND TELEVISION 3 Units**
Applied studies in the techniques of writing for radio and television, including the gathering and writing of news, commercials and public service announcements, radio features and short dramatic scripts. Includes interview techniques, storyboarding, and the presentation of newscasts. Lecture/Laboratory. Transfer: CSU

**RATV 141—DOCUMENTARY PRODUCTION 3 Units**
Designed to explore the various forms and styles of documentary films and videos through critical analysis and hands-on experience. Using a workshop approach, students will learn the process and skills needed to research, write, produce and direct a television documentary. Field trips may be required. Two maximum completions. Lecture/Laboratory. Not offered every semester. Transfer: CSU

**RATV 142—LIGHT, SOUND, CAMERA AND EDITING WORKSHOP 3 Units**
Designed to explore the fundamental technical and aesthetic principles of lighting, sound, editing and camera operation. Expanded knowledge in the areas of technical planning, interior and exterior lighting design, sound recording and enhancement techniques, composing dynamic images with a camera and final digital editing. Prepares students for work in film, television, and digital production. Lecture/Laboratory. (MJC Activities) Transfer: CSU

**RATV 143—NON-LINEAR VIDEO EDITING 3 Units**
Recommended for Success: Basic computer operating skills.
An introduction to the primary elements and basic interface of non-linear video editing. Students learn to perform basic editing functions and to operate the computer software and hardware user interface. Topics include basic software setup including preferences and settings, capturing video and audio files and signals, editing and trimming techniques, audio creation and editing, file finishing and output. Field trips may be required. Lecture/Laboratory. Transfer: CSU

**RATV 150—INTRODUCTION TO MASS COMMUNICATION 3 Units**
Exploration of the impact of the mass media on American society and culture, within a global perspective, and the importance of being more conscious “consumers” of the mass media. Explores the growing variety of career options. Topics include the origin, development and contemporary structure of the print, electronic and digital media, including the Internet, and how they shape the economic, political and social fabric of society, the impact of technology, legal and ethical issues, and social issues including gender and cultural diversity. Field trips may be required. Lecture. Transfer: CSU General Education: (MUC-GE-C)

**RATV 168—MUSIC PRODUCTION FOR MULTIMEDIA 2 Units**
Also offered as MUSC 126
Designed for the student with an interest in music composing, music production, sound design and sound effects. The course will explore production of music for recording artists, music videos, demos, public service announcements, radio programs, graphics animations, commercials, jingles, and TV/film scoring through the use of MIDI sequencing, digital multitrack recording and SMPTE synchronizing. Four completions allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU

**RATV 172—RECORDING ARTS 1 2 Units**
Also offered as MUSC 111
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSC 121 and MUSC 122.
Introduction to the terminology and practices of the recording arts. Properties of sound, microphone placement, multi-track recording, mixing and mastering. Lab time and materials fees will be required. Two completions allowed. Field trips may be required. (A-F or P/NP) (MJC Activities) Transfer: CSU

**RATV 178—RECORDING ARTS 2 2 Units**
Also offered as MUSC 112
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSC 111
Advanced topics in the recording studio relating to the digital recording process. In depth study of microphone choice and placement, microphone pre-amplifiers and analog processors, direct inputting, non-destructive digital editing, software plugins, automation techniques, mixing and mastering in the recording process. Laboratory time required. Materials fee required. Four completions allowed. (MJC Activities) Transfer: CSU

**READ—(Reading)**

**READ 21—VOCABULARY DEVELOPMENT 3 Units**
Non-degree course.
Course designed to improve the vocabulary of students who are functioning at the pre-collegiate level. Appropriate for students who score below 60 on the Accuplacer assessment test. Three maximum completions. Lecture. (A-F Only)

**READ 40—READING COMPREHENSION 3 Units**
Non-degree course.
Designed to improve the student’s comprehension of pre-collegiate reading materials. Appropriate for students who score below the 10th percentile on the MUC Reading Assessment. Three maximum completions. Lecture. (A-F Only)

**READ 45—ELEMENTS OF READING 1 Unit**
Non-degree course.
A computer-based and workshop-based course for students who want to review elements of reading. Offered in the Center for Learning Assistance. Orientation required. Open-entry/Open-exit. (P/NP Only)

**READ 62—COLLEGE VOCABULARY 3 Units**
Development of college level vocabulary. Use of context clues and structural analysis emphasized. Lecture. (A-F Only)

**READ 82—COLLEGE READING - COMPREHENSION 3 Units**
Recommended for Success: A minimum of 10th percentile on the reading assessment or READ 40 with a C or better.
Course designed to improve student’s comprehension and retention of college level materials. Lecture. Maximum one completion. (A-F Only)
**READ 184—CRITICAL READING**
3 Units
Recommended for Success: Satisfactory completion of READ 82 or recommendation of the reading assessment.
Reading for inferred ideas, evaluation of ideas, tone, mood, and style. Discussion of application of reader’s knowledge to reading material. This course with a grade of “C” or better meets MUC reading proficiency requirements. Appropriate for students who score above 85 on the Accuplacer assessment test. Lecture. (A-F Only) Transfer: CSU

**REC (Recreation)**

With increased urbanization, expanded leisure time, and public awareness of the value of recreational activities, trained leaders are needed to organize and administer programs in a variety of settings. Since most jobs in Recreation require a four-year college degree, students in the Recreation program at MJC are encouraged to follow the four-year college transfer pattern and also to complete theoretical and practical recreation classes. Students are also advised to take electives in the fields of art, drama, music, sports, and activities. Considerable flexibility in the Recreation program is allowed in designing an individualized program to strengthen career needs and specialization areas selected by the student.

**REC 110—SOCIAL RECREATION LEADERSHIP**
3 Units
A theory and activity course that teaches leadership techniques and strategies of recreational activities with an emphasis on the integration of individuals into group programs. Lecture. (A-F and P/NP) Transfer: CSU

**RLES (Real Estate)**

**RLES 380—REAL ESTATE PRINCIPLES**
3 Units
Real estate principles and laws in California, including contracts, deeds, land titles, liens, escrows, leases, financing, land descriptions, mandatory disclosures, terminology, ethics, fair housing and licensing. Field trips may be required. Lecture. Transfer: (CC RLEST 1)

**RLES 381—REAL ESTATE PRACTICES**
3 Units
Prerequisite: Satisfactory completion of RLES 380
Practices and techniques of broker and salesperson including listing, prospecting, advertising, disclosures, selling, escrow procedures, financing, exchanges, property management and leases, land utilization and development, public relations and professional ethics, and fair housing in real estate business. Field trips may be required. Lecture. Transfer: (CC RLEST 5)

**RLES 382—LEGAL ASPECTS OF REAL ESTATE 1**
3 Units
Prerequisite: Satisfactory completion of RLES 381
California real property laws including the principle legal aspects of ownership, acquisition and transfer of real property, legal descriptions, contracts, escrow procedures, forms of trust and foreclosure, liens and restrictions, legal instruments. Lecture. Not offered every semester. Transfer: (CC RLEST 10)

**RLES 384—REAL ESTATE FINANCE**
3 Units
Prerequisite: Satisfactory completion of RLES 380 or 381.
Lending regulations, policies and procedures applicable to financing residential, multi-family, commercial and special purpose properties. Special attention to the money market, sources of funds and FHA and VA loans as factors in property financing. Lecture. Not offered every semester.

**RLES 385—REAL ESTATE APPRAISAL, RESIDENTIAL**
3 Units
Prerequisite: Satisfactory completion of RLES 380
Examination of appraisal process to determine property value on cost, sales comparison, and income basis. Consideration of neighborhood and site analysis, residential style and functional utility, three approaches to value, reconciliation of value indicators, and Uniform Standards of Professional Practice. Field trips may be required. Lecture.

**RLES 392—BASIC ESCROW PROCEDURES**
3 Units
Prerequisite: Satisfactory completion of RLES 380 or 381.
Basic escrow elements and practices. Terms, phraseology, and documents. Preparation of instructions and statements and their use; legal descriptions; vesting of title, balancing, debits and credits, loan payoffs and dispensing funds. Lecture. Not offered every semester.

**RSCR (Respiratory Care)**

**RSCR 220—INTRODUCTION TO RESPIRATORY CARE PRINCIPLES**
5 Units
Prerequisite: Satisfactory completion of CHEM 143 with a grade of “C” or .
Covers basic physical principles necessary for the practice of respiratory care to include the following: medical terminology, fundamentals of general bedside patient care skills, underlying physical principles of respiratory care equipment, indications for the use of oxygen and aerosol therapy and related equipment. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only) (Spring) Transfer: CSU

**RSCR 222—BASIC CARDIOPULMONARY ANATOMY AND PHYSIOLOGY**
3 Units
Prerequisites: Satisfactory completion of AP 150 or (ANAT 125 and PHYS 101.)
Formerly listed as RSCR 202.
Structure and functions of the pulmonary and cardiovascular systems. Application of laws of gas and fluid physics to the cardiopulmonary system. Field trips may be required. Lecture (A-F Only) (Fall) Transfer: CSU

**RSCR 224—RESPIRATORY CARE THEORY 2**
5 Units
Prerequisites: Satisfactory completion of RSCR 220.
Formerly listed as RSCR 203.
Theoretical foundation for basic treatment modalities utilized in respiratory care. Topics covered include: hyper-inflation therapies, chest physical therapy, basic airway care and cardiopulmonary pharmacology. Associated equipment will be covered during scheduled labs. Field trips may be required. Lecture/Laboratory. Materials fee required. (Spring) (A-F Only) (Fall) Transfer: CSU

**RSCR 230—CLINICAL 1**
1 Unit
Concurrent Enrollment: RSCR 220
Formerly listed as RSCR 205.
Clinical experience in oxygen therapy, aerosol-humidity therapy and other basic respiratory care modalities used in area hospitals. Two maximum completions. Field trips may be required. Laboratory. Materials fee required (items for infection control and/or malpractice liability insurance). (P/NP Only) (Spring, Summer: for those students with AP 150 during Spring.) Transfer: CSU

**RSCR 232—CLINICAL 2**
3½ Units
Prerequisites: Satisfactory completion of RSCR 230.
Concurrent Enrollment: RSCR 224
Formerly listed as RSCR 206.
Clinical experience in the various routine respiratory care procedures and the equipment used in area hospitals. Attention is paid to the student performing critical evaluations of current therapy and the application of clinical practice guidelines. Field trips may be required. Two maximum completions. Laboratory. (Fall) (P/NP Only) Transfer: CSU
RSCR 240—ADVANCED CARDIOPULMONARY PHYSIOLOGY AND DIAGNOSTICS
Prerequisites: Satisfactory completion of RSCR 222 and 224.
Formerly listed as RSCR 211.
Advanced cardiopulmonary physiology and diagnostics for the second year respiratory care student. Includes advanced arterial blood gas analysis, indices of oxygenation, chest x-ray interpretation, hemodynamic monitoring, laboratory testing, capnography, and ECG interpretation with emphasis on clinical setting application. Also includes discussion of various pathologies caused by cardiovascular conditions. Field trips may be required. Lecture. (A-F Only) (Spring) Transfer: CSU

4½ Units

RSCR 242—CRITICAL CARE PROCEDURES
Prerequisites: Satisfactory completion of RSCR 222, 224 and MICRO 101.
Formerly listed as RSCR 212.
Theory and application of critical care procedures for second-year respiratory care students. This includes advanced theory and application of mechanical ventilators, associated pathophysiology and pharmacology, microbiological issues in respiratory care, application of ECG interpretation and chest x-ray interpretation. Field trips may be required. Lecture/Laboratory. (Spring) (A-F Only) Transfer: CSU

4½ Units

RSCR 244—NEONATAL-PEDIATRIC RESPIRATORY CARE
Prerequisites: Satisfactory completion of RSCR 240 and 242.
Formerly listed as RSCR 214.
Introduction to respiratory care in the neonatal patient. Topics include fetal and neonatal development, resuscitation, pathophysiology, and neonatal and pediatric respiratory care procedures. Also open to those holding valid Respiratory Care Practitioner or Registered Nurse license. Field trips may be required. Lecture. (A-F Only) Transfer: CSU

2 Units

RSCR 246—CURRENT ISSUES IN RESPIRATORY CARE
Prerequisites: Satisfactory completion of RSCR 240 and 242.
Formerly listed as RSCR 215.
Specialty areas in Respiratory Care: home care, skilled nursing facility care, management and administrative issues, pulmonary rehabilitation and education, metabolic studies, nutrition, sleep studies, assisting physicians in procedures, and blood gas analysis. Course also includes a comprehensive review to prepare students for state and national examination. Field trips may be required. Lecture: (A-F Only) Transfer: CSU

3 Units

RSCR 248—SELF-DIRECTED STUDY
Prerequisites: Satisfactory completion of RSCR 242.
Formerly listed as RSCR 218.
Preparation for therapist level clinical simulation exam. Students spend 1.5 hours per week on a self-directed basis completing computerized clinical teaching and testing simulations. Also open to those possessing a valid RCP license. Three maximum completions. Laboratory. Materials fee required. (P/NP Only) (Fall) Transfer: CSU

½ Unit

RSCR 250—CLINICAL 3
Prerequisites: Satisfactory completion of RSCR 232.
Concurrent Enrollment: RSCR 240 and 242.
Formerly listed as RSCR 213.
Clinical experience in the various critical care respiratory procedures and the equipment used for these procedures in various area hospitals. Field trips may be required. Two maximum completions. Laboratory. Materials fee required. (P/NP Only) (Spring) Transfer: CSU

3½ Units

RSCR 251—NEONATAL AND PEDIATRIC CLINICAL PRACTICE 1
Prerequisites: Satisfactory completion of RSCR 242
Concurrent Enrollment: RSCR 244
Introduction to respiratory care clinical practice in perinatal, neonatal and pediatric care. Field trips may be required. Laboratory. (Summer) (P/NP Only) Transfer: CSU

½ Unit

RSCR 252—PHYSICIAN ROUNDS FOR RESPIRATORY CARE
Concurrent Enrollment: RSCR 244 and 246.
Formerly listed as RSCR 210.
Opportunity for interaction between physicians and respiratory care students to determine the appropriateness of a respiratory care plan, includes use of computer instruction in formulating adequate care plans and use of respiratory care protocols. Laboratory. (P/NP Only) Transfer: CSU

½ Unit

RSCR 253—NEONATAL AND PEDIATRIC CLINICAL PRACTICE 2
Prerequisites: Satisfactory completion of RSCR 242
Concurrent Enrollment: RSCR 244
Additional respiratory care clinical practice in perinatal, neonatal and pediatric care. Field trips may be required. Laboratory. (Summer) (P/NP Only) Transfer: CSU

½ Unit

RSCR 255—CLINICAL 4
Prerequisites: Satisfactory completion of RSCR 244
Concurrent Enrollment: RSCR 246
Formerly listed as RSCR 254.
Continued clinical experience in critical care units and introduction to clinical care in the neonatal intensive care unit as well as alternative site respiratory care. Field trips may be required. Laboratory. Materials fee required (items for malpractice liability insurance). (Fall) (P/NP Only) Transfer: CSU

4½ Units

RSCR 257—CLINICAL PRECEPTORSHIP
Prerequisites: Satisfactory completion of RSCR 244
Concurrent Enrollment: RSCR 246
Formerly listed as RSCR 256.
Four week clinical preceptorship in which student must demonstrate proficiency in all areas of clinical respiratory care practice. Field trips may be required. Laboratory. (P/NP Only) (Fall) Transfer: CSU

2½ Units

SIGN (Sign Language)

SIGN 125—ASL: BEGINNING COMMUNICATION WITH THE DEAF
Introduction to the American Manual Alphabet and American Sign Language, designed to provide basic conversational skill in the language used among most deaf people in the United States. Equivalent to the first two years of high school ASL. Field trips may be required. Lecture. Equivalent to the satisfactory completion of two years high school sign language. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)

SIGN 126—ASL: INTERMEDIATE COMMUNICATION WITH THE DEAF
Communicating with and interpreting for the Deaf through use of the American Manual Alphabet and American Sign Language. Equivalent to the satisfactory completion of three years of high school ASL. Field trips required. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)

SIGN 127—ASL: ADVANCED COMMUNICATION WITH THE DEAF
Extensive development of and practice in American Sign Language for those who would like to interpret for the Deaf or for those want to become professionals working in the Deaf community. Equivalent to the satisfactory completion of four years of high school ASL. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)
SM (Sheet Metal)

The Vocational Sheet Metal courses teach layout, measurement, forming, and installation as well as the mathematics required for sheet metal fabrication. Curriculum is developed and closely monitored in consultation with local air conditioning and heating contractors.

SM 331—VOCATIONAL SHEET METAL AND INSTALLATION 1 3 Units
Formerly listed as SM 31.
Tools and machinery used by sheet metal trades. Training in the procedures using patterns, cutting, making seams and riveting metals. Safety in sheet metal shop. Basic mathematical application. Opportunities in the trade. Field trips may be required. Lecture. (A-F Only)

SM 332—VOCATIONAL SHEET METAL AND INSTALLATION 2 3 Units
Prerequisite: Satisfactory completion of SM 331
Formerly listed as SM 32.
Techniques perfected in turning, burring, raising, forming, crimping, and beading. Short method of pattern development. Parallel line and radial line development. Linear and geometric measure. Field trips may be required. (A-F Only)

SM 333—VOCATIONAL SHEET METAL AND INSTALLATION 3 3 Units
Prerequisite: Satisfactory completion of SM 332
Formerly listed as SM 33.

SM 334—VOCATIONAL SHEET METAL AND INSTALLATION 4 3 Units
Prerequisite: Satisfactory completion of SM 333
Formerly listed as SM 34.

SM 335—VOCATIONAL SHEET METAL AND INSTALLATION 5 3 Units
Prerequisite: Satisfactory completion of SM 334
Formerly listed as SM 35.
Sheet metal pattern development and pattern drafting. Continued study of mathematics for sheet metal fabrication. Field trips may be required. Lecture. (A-F Only)

SM 336—VOCATIONAL SHEET METAL AND INSTALLATION 6 3 Units
Prerequisite: Satisfactory completion of SM 335
Formerly listed as SM 36.
Continuation of mathematics for sheet metal fabrication, pattern development and pattern drafting. Field trips may be required. Lecture. (A-F Only)

SM 337—VOCATIONAL SHEET METAL AND INSTALLATION 7 3 Units
Prerequisite: Satisfactory completion of SM 336
Formerly listed as SM 37.
Advanced study of mathematics for sheet metal fabrication, sheet metal pattern development and pattern drafting. Field trips may be required. Lecture. (A-F Only)

SM 338—VOCATIONAL SHEET METAL AND INSTALLATION 8 3 Units
Prerequisite: Satisfactory completion of SM 337
Formerly listed as SM 38.
Advanced training in conjunction with the manipulation skills acquired in daily work, to develop well qualified sheet metal workers. Field trips may be required. Lecture. (A-F Only)

SOCIO (Sociology)

SOCIO 101—INTRODUCTION TO SOCIOLOGY 3 Units
The study of human social interaction, groups and societies with emphasis upon culture, social differences, institutions and change. Field trips may be required. Lecture. Transfer: CSU, UC (TCSU SOC 110)(CC SOCIO 1) General Education: (MJC-GE: B) (CSU-GE: D0) (IGETC: 4)

SOCIO 102—SOCIAL PROBLEMS IN THE UNITED STATES 3 Units
The experiences of caregivers and patients from several ethnic minority groups. The study of contemporary social problems within the American society emphasizing, among other topics, alcohol and drugs, crime and violence, family problems, power, race, and gender inequalities. Construction of possible solutions to social problems will also be discussed. Field trips may be required. Lecture. Transfer: CSU, UC (CC SOCIO 2) (TCSU SOC 120) General Education: (MJC-GE: B) (CSU-GE: D0) (IGETC: 4)

SOCIO 125—SOCIOLOGY OF THE FAMILY 3 Units
Comparative and historical treatment of the family. Analysis of kinship and family structure, roles and relationships within the family. Assessment of contemporary society on the family in America. Lecture. Transfer: CSU, UC (CC SOCIO 12) General Education: (CSU-GE: D0) (IGETC: 4)

SOCIO 131—SOCIOLOGY OF MEDICINE: CROSS-CULTURAL PERSPECTIVES 3 Units
The experiences of caregivers and patients from several ethnic minority groups (Hispanic, African American and Southeast Asian) provide access to an understanding of some of the meanings and traditions of health in the U.S. Definitions of health and strategies of healing as well as the distribution of illness in our stratified, multicultural society are examined. The influence of Western biomedicine, its network of roles and relationships and the effects of economics and bioethics on health care delivery are evaluated. Field trips may be required. Lecture. Transfer: CSU, UC. General Education: (MJC-GE: B)

SOCIO 150—ETHNICITY AND CULTURE IN AMERICA 3 Units
A multidisciplinary study of ethnic and racial groups in the United States including Asian-Americans, African-Americans, Hispanics, among others. Emphasizes emergence, change, marginality, and integration of major ethnic groups in the United States. Field trips may be required. Lecture. Transfer: CSU, UC (CC SOCIO 5) General Education: (MJC-GE: B) (CSU-GE: D0, D3) (IGETC: 4)

SOCIO 154—AFRICAN-AMERICAN CULTURES AND COMMUNITIES 3 Units
A sociological exploration of the social and historical forces shaping contemporary African-American experiences and their multiple statuses in American society. Effects of stratification, conflict and change as well as the historical and current roles of the family within dynamic communities are emphasized. Lecture. One completion allowed. Transfer: CSU, UC. General Education: (MJC-GE: B) (CSU-GE: D0, D3) (IGETC: 4)

SOCIO 156—MEXICAN CULTURE IN THE UNITED STATES 3 Units
Contemporary Mexican-American Culture, problems and contributions, origins and nature. Intergroup contacts and conflicts. Field projects concern Mexican-American assimilation within the region. Lecture. Once completion allowed. Transfer: CSU, UC. General Education: (MJC-GE: B) (CSU-GE: D0, D3) (IGETC: 4)
SOCSC (Social Science)

SOCSC 58—STUDENT LEADERSHIP DEVELOPMENT 2 Units
Theory and practice of leadership. Prepares students for productive involvement in community service, college activities, and civic governance. Designed especially, but not exclusively, for students participating in student government and club activities. Field trips may be required. Two maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: (EC GUIDE 115)

SOCSC 105—WOMEN’S STUDIES 3 Units
Recommended for Success: ENGL 101; INDIS 55 or 105
A multidisciplinary introduction to the origins, purpose, subject matter, and methods of feminist theory in the social sciences. This course explores political, economic, social, cultural and historical issues from a feminist perspective. The focus is on classic feminist texts: how they have changed gender roles in society, how feminist politics have evolved, and how they have shaped contemporary world views. Lecture. Transfer: CSU, UC. General Education: (MJC-GE: B, C) (CSU-GE: D4) (IGETC: 3B, 6A)

SOCSC 109—INTRODUCTION TO EDUCATION - PRACTICUM IN TUTORING 2 Units
Orientation to the teaching profession. Designed for prospective elementary, secondary or college teachers but open to all. Students are required to observe and tutor in an appropriate educational setting. Partially meets field experience requirement for teaching credential program at CSU Stanislaus. Fingerprint clearance and TB clearance is required. Lecture. Transfer: CSU (CC INDIS 10)

SOCSC 110—INTRODUCTION TO EDUCATION 3 Units
Orientation to the teaching profession. Designed for prospective elementary, secondary or college teachers but open to all students. Students are required to observe and participate in community classrooms. Meets field experience requirements for teaching credential program. Fingerprint clearance and TB clearance is required. Lecture. Transfer: CSU, UC (CC INDIS 12) General Education: (MJC-GE: B)

SOCSC 120A, 120B, 120C—COMPUTER APPLICATIONS IN THE SOCIAL SCIENCES 1,2,3 Units
Application of computers to social sciences activities. Writing, research, data collection, simulations, survey and laboratory research. Field trips may be required. May be repeated to six units maximum. Lecture or Laboratory. Transfer: CSU

SOCSC 154 – MOVIES WITH A MESSAGE 3 Units
Also offered as FILM 154.
A thematic film course aimed at using the medium of film to broaden the awareness of current societal and global issues, focusing on different topics semester to semester. Selected sequences of feature films, documentaries, unusual foreign and domestic releases will explore how film makers depict aspects of history, culture, religion, race, gender, class, ideology and other issues in a global perspective. Course will cover related elements of film style and theory, such as the relationship of subject to style, form and function. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C)(CSU-GE:C1)

SPAN (Spanish)

SPAN 45, A, B, C—PRACTICAL SPANISH FOR THE PROFESSIONS ½, 1, 2, 3 Units
Non-degree course.
Conversational Spanish for people working with the Spanish-speaking in the following areas: health, education, law enforcement, social work, agriculture, construction, public safety, and business. Occupational topics vary from semester to semester. May be repeated for credit as topic changes. Field trips may be required. Lecture. Multiple completions not to exceed 9 units in any combination.

SPAN 51—INTRODUCTORY SPANISH 1 3 Units
Formerly listed as “SPAN 51 - Introduction to Practical Spanish.”
Slow-paced, non-transferable course designed for people who have never studied a foreign language, especially Spanish. Basic Spanish grammar and pronunciation. Field trips may be required. Lecture/Laboratory. Transfer: (EC SPAN 10A) General Education: (MJC-GE: C)

SPAN 52—INTRODUCTORY SPANISH 2 3 Units
Formerly listed as “SPAN 52 - Introduction to Practical Spanish 2”
Prerequisite: Satisfactory completion of SPAN 51 or equivalent introductory course.
Slow-paced, non-transferable course designed for people who wish to continue from SPAN 51. Basic Spanish grammar and pronunciation. Field trips may be required. Lecture/Laboratory. One completion allowed. General Education: (MJC-GE: C)

SPAN 101—SPANISH 1 5 Units
Fundamentals of spoken and written Spanish. Field trips may be required (A-F or P/NP). Approved for hybrid and telecourse instruction. Equivalent to the satisfactory completion of two years high school Spanish. Transfer: CSU, UC (CC SPAN 1A) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 6A)

SPAN 102—SPANISH 2 5 Units
Prerequisite: Satisfactory completion of SPAN 101.
Continuation of SPAN 101. Emphasis on preterite and imperfect tenses of the indicative mood. Equivalent to the completion of three years of high school Spanish. (A-F or P/NP) Transfer: CSU, UC (CC SPAN 1B) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 6A)

SPAN 103—SPANISH 3 5 Units
Prerequisite: Satisfactory completion of SPAN 102.
Continuation of Spanish 102. Includes Spanish grammar, conversation, reading and composition. Also includes reading and discussion in Spanish of selections from literary works of Spanish and Latin American writers. Equivalent to the satisfactory completion of four years of high school Spanish. Lecture/Laboratory (A-F or P/NP) Transfer: CSU, UC (TCSU SPAN 130, TCSU CAN SEQ B) (CC SPAN 2A) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)

SPAN 104—SPANISH 4 5 Units
Prerequisite: Satisfactory completion of SPAN 103.
Review and expansion of grammatical structures covered in Spanish 101-103. Includes a review of the uses of the subjunctive and the reading and discussion of literary works of Spanish and Latin American writers. (A-F or P/NP). Field trips may be required. Transfer: CSU, UC (TCSU SPAN 130, TCSU CAN SEQ B, TCSU SPAN 140) (CC SPAN 2B) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B,6A)

SPAN 109—SPANISH FOR SPANISH SPEAKERS: 4 Units
FUNDAMENTALS
Recommended for Success: Near native ability to speak and understand Spanish, but little or no formal academic training in the language. Determined by test.
Fundamentals of spoken and written Spanish for speakers with little or no academic study of Spanish. Includes major elements of Spanish grammar and focuses on improving oral and written communication skills. Taught in Spanish. Field trips may be required. (A-F or P/NP) One completion allowed. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE:C2)
SPAN 110—SPANISH FOR SPANISH SPEAKERS: INTERMEDIATE 4 Units
Prerequisite: Satisfactory completion of SPAN 109 or equivalent skill level, as determined by test.
A continuation of SPAN 109. Completes the study of grammar and helps Spanish-speaking students further improve their oral and written communication skills. Taught in Spanish. Lecture. Field trips may be required. (A-F or P/NP) One completion allowed. Transfer: CSU, UC General Education: (MJC-GE C) (CSU-GE C2) (IGETC 3B, 6A)

SPAN 112—INTRODUCTION TO CHICANO/AMERICAN LITERATURE 3 Units
Prerequisite: Satisfactory completion of SPAN 104 or SPAN 110.
Overview of the historical development and current trends in Chicano/a literature; taught in Spanish. Offered in the Spring semester. Field trips may be required. Approved for hybrid instruction (A-F or P/NP) Applicable to the Associate Degree. Transfer: CSU, UC General Education: (MJC-GE C) (CSU-GE C2) (IGETC 3B, 6A)

SPAN 173—SURVEY OF LATIN AMERICAN LITERATURE 3 Units
Prerequisite: Satisfactory completion of SPAN 104 or SPAN 110.
Introduction to Latin American literature from its Colonial Period to the present; a chronological survey of major works from different literary movements and from various genres such as chronicles, poetry, short story, essay, drama, and the novel. Taught in Spanish. Offered in the Fall semester. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC General Education: (MJC-GE C) (CSU-GE C2) (IGETC 3B, 6A)

SPCOM (Speech Communication)
The Speech Communication Program at Modesto Junior College offers students a variety of courses which incorporate both theory and performance instruction. These include public speaking, argumentation and debate, organizational communication, intercultural and interpersonal communication, contest speaking and forensics competition which includes debate and individual events. The MJC Forensics Team has captured a number of state and national championships. The program also offers courses in practical speech communication and voice improvement. Most courses are available to students in both day and evening hours.

SPCOM 100—FUNDAMENTALS OF PUBLIC SPEAKING 3 Units
Developing individual effectiveness in various speech activities, emphasis on public speaking, instruction and practice in selection, organization and presentation of materials. Development of self-confidence and listening skills. Lecture. (A-F and P/NP) Transfer: CSU, UC (CC SPCOM 1)
General Education: (MJC-GE D2) (CSU-GE A1) (IGETC 1C)

SPCOM 101—VOICE AND ARTICULATION 3 Units
Formerly listed as "Basic Voice and Articulation"
Also offered as RATV 101 and THER 101.
Training program in basic voice and articulation. Emphasis on critical listening, self-analysis and self-improvement in tonal production and control, voice quality, articulation and pronunciation. Introduction to the International Phonetic Alphabet. This is not a class for persons with a major speech or language disorder. (A-F or P/NP) One completion allowed. Lecture. Transfer: CSU, UC (CC DRAMA/SPCOM 18)

SPCOM 102—INTRODUCTION TO HUMAN COMMUNICATION 3 Units
The study of human communication including verbal, nonverbal and listening skills. Effective oral participation in interpersonal contexts, group discussions, and individual presentations in public settings. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC SPCOM 4)
General Education: (MJC-GE D2) (CSU-GE A1) (IGETC 1C)

SPCOM 103—INTERPERSONAL COMMUNICATION 3 Units
Principles of interpersonal communication including perceptual, verbal and nonverbal elements. The study of theory, research findings, concepts and skills in interpersonal relationships as applied to various interactions, such as the male/female relationship, the family, and the workplace. (A-F or P/NP) Lecture. Transfer: CSU, UC (TCSU COMS 130) 173 General Education: (MJC-GE D2) (CSU-GE D7)

SPCOM 104—ARGUMENTATION 3 Units
Prerequisite: Satisfactory completion of ENGL 101
Primary emphasis on argumentation as the study of analysis, evidence, reasoning, refutation and rebuttal, etc., in oral and written communication. Significant component of instruction in written argumentation, with special attention to the essay form. "Critical Thinking" approaches to commercial, legal, political, and academic argumentation and persuasion. Field trips may be required. Lecture. Transfer: CSU, UC (CC SPCOM 2) General Education: (MJC-GE D2) (CSU-GE A1) (IGETC 1B)

SPCOM 105—FORENSICS DEBATE 2 Units
Formerly listed as "SPCOM 105 - Forensics Workshop"
Principles of debate applied through participation in competitive debate. Students will participate in intercollegiate forensics. Competitive events include parliamentary, NFA Lincoln/Douglas and policy debate. Four completions allowed. Field trips required. Laboratory (A-F or P/NP) (MJC Activities) Transfer: CSU (CC SPCOM 7)

SPCOM 106—GROUP & ORGANIZATIONAL COMMUNICATION 3 Units
Formerly listed as "SPCOM 106 - Organizational Communication"
Also offered as SUPR 106.
Communication within and between groups and organizations while enhancing relevant individual communication skills. Emphasis on communication and organizational theory as basis for focus on such communication processes as interviewing, task-oriented discussion, problem solving, leadership, conflict resolution and negotiation, communication climate, and organizational culture. One completion allowed. (A-F or P/NP) Lecture. Transfer: CSU General Education: (MJC-GE D2)

SPCOM 107—INTRODUCTION TO DEBATE 3 Units
Argumentation principles and the debate format. Emphasis on case construction, methods of attack and defense, communication strategies, and various forms of debate. Field trips may be required. Lecture. Transfer: CSU, UC General Education: (MJC-GE D2) (CSU-GE A3)

SPCOM 109—WOMEN IN MANAGEMENT 3 Units
"Formerly listed as SPCOM 109 — Managerial Skills for Women"
Communication and leadership skills for effective business management. Emphasis on the women’s movement into management positions, effective communication strategies in organizations, building teams, supervising employees, interpersonal skills, assertiveness training and decision-making skills. Lecture. (A-F or P/NP) Field trips are not required. Lecture. Transfer: CSU

SPCOM 110—PERSUASION 3 Units
Development of abilities to plan and deliver persuasive presentations through a combination of methods involving the study of "real" communicative events, i.e., trials, sales presentations, political campaigns, sermons, etc., and the preparation and presentation of own works. Survey of recent research in attitude change and persuasive communication. Field trips may be required. Lecture. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC General Education: (MJC-GE D2) (CSU-GE A1) (IGETC 1B)

SPCOM 115—FORENSICS PLATFORM SPEECHES 2 Units
Principles of applied speech communication through participation in competitive speech performances. Students will participate in intercollegiate forensics. Competitive events include informative speaking, persuasive speaking, communication analysis, speech to entertain, after dinner speaking, extemporaneous speaking, and impromptu speaking. (A-F or P/NP) (Laboratory) Field trips are required. Four completions allowed. (MJC Activities.)

SPCOM 120—ORAL READING AND INTERPRETATION 3 Units
Also offered as THEIR 120.
Skills in oral interpretation of literature, choice of material, involvement with material, communication of author’s thought, emotion and language, expanded knowledge of literature and literary forms. Credit given for either SPCOM 120 or SPCOM 120, but not both. Lecture/Laboratory. (A-F and P/NP) Transfer: CSU, UC (CC DRAMA 20) General Education: (MJC-GE C) (CSU-GE C1)
### SPELL (Spelling)

**SPELL 31—BASIC SPELLING AND PHONICS**  
3 Units  
Non-degree course.  
Designed for non-native speakers to improve reading and spelling. Sound-symbol relationships in English. Emphasis on phonics rules. Discrimination between words which are similar in either spelling or sound. Help with pronunciation of words encountered in reading. Appropriate for students who score below 60 on the Accuplacer assessment. Two maximum completions. Lecture. Field trips may be required. (MJC Activities)  
Transfer: CSU, UC General Education: (CSU-GE: C) (CSU-GE: D2)  

**SPELL 32—SPELLING AND PUNCTUATION**  
3 Units  
Recommended for success: Concurrent enrollment in ENGL 49 or ENGL 50.  
Non-degree course.  
Course is designed to improve spelling and pronunciation habits by introducing and using the phonic patterns of English. Two maximum completions not to exceed 6 units. Lecture. (A-F Only)

### SPCOM - THETR

**SPCOM 122—INTRODUCTION TO READERS' THEATRE**  
3 Units  
Also offered as THETR 122.  
Study of oral interpretation principles as they apply to group and choral reading. Emphasis will be placed upon the preparation and performance of Readers’ Theatre productions. Students will be provided with the necessary theory, practice, and criticism to develop skills for organization and oral presentation of Readers’ Theatre materials. Lecture. Field trips may be required. (MJC Activities)  
Transfer: CSU General Education: (CSU-GE: C1)  

**SPCOM 123—STORYTELLING**  
3 Units  
Formerly listed as “SPCOM 123 - Storytelling: The Interpretation Of Children's Literature”.  
Also offered as THETR 123.  
Introduction to the art of storytelling focusing on the preparation and presentation of literature. Emphasis is placed upon selection of materials, analysis, preparation, and presentation of various genres of stories. Designed to develop the adult reader’s knowledge, critical ability and appreciation of literature, as well as critical listening of others sharing literature. Field trips may be required. Lecture. One completion allowed. (A-F or P/NP) (MJC Activities)  
Transfer: CSU General Education: (CSU-GE: C1)  

**SPCOM 124—ADVANCED READERS' THEATRE**  
3 Units  
Recommended for Success: Satisfactory completion of (SPCOM 120 or 122) or (THETR 120 or 122.)  
Also offered as THETR 124.  
Continued development of the construction and direction of Readers’ Theatre performances suitable for public presentation. Emphasis on analysis of reading materials and helping others enhance communication skills through vocal control and physical expression. Field trips may be required. Lecture.  
Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)  

**SPCOM 125—FORENSICS INTERPRETATION EVENTS**  
3 Units  
Principles of applied speech communication through participation in interpretative presentation of literature performances. Students will participate in intercollegiate forensics. Competitive events include prose, poetry, drama, duet, and oral interpretation plus readers’ theatre. Four completions allowed. Field trips are required. (A-F or P/NP) Laboratory. (MJC Activities)  
Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)  

**SPCOM 130—INTERCULTURAL COMMUNICATION**  
3 Units  
Examines the influence of culture on human communication. Students will learn skills to communicate effectively with people from different cultures. Theoretical and practical models are explored. Emphasis on cultural identity, relationships, stereotyping, prejudice, nonverbal and verbal cues, values, beliefs, and norms. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU, UC (CC SPOM 5) General Education: (MJC-GE: D2) (CSU-GE: D3 or D7) (IGETC: 4)  

**SPCOM 145—PARLIAMENTARY PROCEDURE**  
1 Unit  
Also offered as AGGE 145.  
Introduction to Parliamentary Procedure. Preparing for and participating in meetings as a member, officer, and chairperson. Rank and use of motions. Two completions allowed. Lecture. (A-F or P/NP)  
Transfer: CSU  

**STSK (Study Skills)**

**STSK 25—STUDENT SUCCESS STRATEGIES**  
1 Unit  
Designed to increase the student’s success in college and to facilitate the transition to the workplace. Practical emphasis on goal setting, time management, study skills and interpersonal communication. This class does not meet guidance requirements for graduation. Lecture.  

**STSK 78—COLLEGE STUDY SKILLS**  
3 Units  
Introduction to educational, psychological and social factors necessary for college success. Topics include: goal-setting, time management, note-taking, textbook reading, test-taking skills, memory, concentration, motivation, writing and speaking, critical and creative thinking, learning styles, use of technology, diversity, health, relationships, finances, educational planning, and career development. Acquaints students with the college, its curriculum, facilities, services, regulations, programs, degree and transfer requirements. Lecture. (MJC Guidance) (A-F Only) (CC GUIDE 100)  

**SUPR (Supervisory Management)**

**SUPR 106—GROUP & ORGANIZATIONAL COMMUNICATION**  
3 Units  
Formerly listed as "SUPR 106 - Organizational Communication"  
Also offered as SPOM 106.  
Communication within and between groups and organizations while enhancing relevant individual communication skills. Emphasis on communication and organizational theory as basis for focus on such communication processes as interviewing, task-oriented discussion, problem solving, leadership, conflict resolution and negotiation, communication climate, and organizational culture. One completion allowed. (A-F or P/NP) Lecture. Transfer: CSU General Education: (MJC-GE: D2)  

**SUPR 351—ELEMENTS OF SUPERVISION**  
3 Units  
Nature and function of supervisor’s role in business, industry and government. The skills and techniques of effective management will be examined and applied in terms of attaining maximum results through the cooperative efforts of others. Lecture.  

**SUPR 364—TOTAL QUALITY MANAGEMENT**  
3 Units  
Recommended for Success: SUPR 351, BUSAD 240.  
Also offered as BUSAD 364.  
This course provides an introduction to W. Edward Deming’s philosophy of Total Quality Management and its implications for improving the competitiveness of American business in the international economy. A variety of related management topics is also presented. Lecture.  

**THETR (Theatre)**

**THETR 100—INTRODUCTION TO THEATRE ARTS**  
3 Units  
Investigation of process of collective art of theatre, the role of actor, director, playwright, designer, technician and audience. Survey of theatre origins, its development as an art form, and its social, political and cultural implications in history. Attendance at MJC theatre productions required; 25 hours required work on productions or a 10 page term paper. Field trips may be required. Materials fee may be required to cover cost of theatre tickets. Lecture. Transfer: CSU, UC (CC DRAMA 10) General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)
THETR 101 — VOICE AND ARTICULATION 3 Units
Formerly listed as “Basic Voice and Articulation” Also offered as RATV 101 and SPCOM 101.
Training program in basic voice and articulation. Emphasis on critical listening, self-analysis and self-improvement in tone production and control, voice quality, articulation and pronunciation. Introduction to the International Phonetic Alphabet. This is not a class for persons with a major speech or language delay or disorder. (A-F or P/NP) One completion allowed. Lecture. (MJC Activities) Transfer: CSU; UC (CC DRAMA/SPCOM 18)

THETR 102 — WORLD THEATRE 3 Units
Survey of world theatre and its development as an art form through social, political and cultural contexts. Investigation of cultural traditions and styles, values, aesthetics will be explored. Field trips required. Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE:C1)|IGETC: 3A

THETR 103 — DANCE REPETORY REHEARSAL AND PERFORMANCE 3 Units
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete THETR 192. Preparation and presentation of a modern/contemporary dance performance for public viewing. Four completions allowed. (A-F or P/NP) Transfer: CSU, UC

THETR 120 — ORAL READING AND INTERPRETATION 3 Units
Also offered as THETR 120. Skills in oral interpretation of literature; choice of material, involvement with material; communication of author’s thought, emotion and language; expanded knowledge of literature and literary forms. Credit given for either THETR 120 or SPCOM 120, but not both. Lecture/Laboratory. (A-F or P/NP) Transfer: CSU, UC (CC DRAMA 20) General Education: (MJC-GE: C) (CSU-GE: C1)

THETR 122 — INTRODUCTION TO READERS’ THEATRE 3 Units
Also offered as SPCOM 122. Study of oral interpretation principles as they apply to group and choral reading. Emphasis will be placed upon the preparation and performance of Readers’ Theatre productions. Students will be provided with the necessary theory, practice, and criticism to develop skills for organization and oral presentation of Readers’ Theatre materials. Lecture. Field trips may be required. (MJC Activities) Transfer: CSU, UC (CC DRAMA 22) General Education: (CSU-GE: C1)

THETR 123 — STORYTELLING 3 Units
Formerly listed as “SPCOM 123 -Storytelling: The Interpretation Of Children’s Literature” Also offered as SPCOM 123.
Introduction to the history of storytelling and the techniques of critical listening to, preparation and presentation of literature. Emphasis on sources, selection of materials, analysis, preparation and presentation of prose, verse, and drama. Designed to develop the adult reader’s knowledge, critical ability, and appreciation of literature. Field trips may be required. Lecture. One completion allowed. (A-F or P/NP) (MJC Activities) Transfer: CSU, UC General Education: (CSU-GE: C1)

THETR 124 — ADVANCED READERS’ THEATRE 3 Units
Recommended for Success: Satisfactory completion of (SPCOM 120 or 122) or (THETR 120 or 122.) Also offered as SPCOM 124.
Continued development of the construction and direction of Readers’ Theatre performances suitable for public presentation. Emphasis on analysis of reading materials and helping others enhance communication skills through vocal control and physical expression. Field trips may be required. Lecture. Transfer: CSU; UC General Education: (MJC-GE: C) (CSU-GE:C1)

THETR 131 — FUNDAMENTALS OF CHOREOGRAPHY 2 Units
Introduction into the creative process involved in composing dance. The knowledge of compositional components will be explored, crafted, and aesthetically analyzed. Exploration of qualities and dynamics, elements of dance, performance qualities will be addressed through technique, improvisation, and compositional studies. Field trips required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

THETR 150 — ELEMENTS OF PLAYWRITING 3 Units
Recommended for Success: Satisfactory completion of ENGL 101 & THETR 100.
Introduction to the writing of dramatic scripts for the stage, culminating in a staged reading of completed drafts with actors before an audience. Field trips required. Two maximum completions. Lecture/Laboratory. Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1,C2)

THETR 160 — FUNDAMENTALS OF ACTING 3 Units
Survey of the various elements of the actors art leading to an understanding and appreciation of the physical, mental, and emotional basis of performance. Reading plays, analysis of public performances, role analysis and fundamentals of scene playing are included. Required for Theatre Arts majors. Recommended for those who may wish to participate in play production. Lecture/Laboratory. Field trips may be required. (MJC Activities) Transfer: CSU, UC (CC DRAMA 42, CAN DRAMA 8) General Education: (CSU-GE: C1)

THETR 161 — INTERMEDIATE ACTING 3 Units
Prerequisite: Satisfactory completion of THETR 160 or equivalent.
Intensive study of plays through group reading and analysis of theme, content, and character. Scenes from the plays under discussion will be rehearsed and performed with a final public performance culminating the experience. Includes preparation of dramatic material and actor psychology for auditions. Four maximum completions. Field trips may be required. Lecture/Other. (Spring) Transfer: CSU; UC General Education: (CSU-GE: C1)

THETR 164 — IMPROVISATIONAL ACTING 3 Units
Intensive study of the basic techniques of theatre games and improvisational acting with specific concentration on improvisational theatre formats. Course will culminate in a public improvisational performance. May be completed up to 3 times. Field trips may be required. (A-F or P/NP). Applicable to the Associate Degree. (MJC Activities) Transfer: CSU, UC (CC DRAMA 46)

THETR 165 — HISTORY OF THE AMERICAN MUSICAL THEATRE 3 Units
The art of the American musical theatre: the role of the performer, director, music director, book writer, composer, lyricist, choreographer, producer, designer, and audience. Survey of the origins of music theatre beginning with “The Black Crook” (1866) through the present, its development as an art form, and its relationship to other art forms and the audience. Attendance at musical theatre productions required. Lecture. Tickets fees are required. (P/NP Only) Transfer: CSU; UC General Education: (MJC-GE: C) (CSU-GE: C1)

THETR 170 X,A — HIP HOP ½,1 Unit
Also listed as PEC 120X, A
Fundamental skills of hip hop dance derived from the current dance vernacular and culture. Dance movement education, exploration, and recreation. May be completed up to 4 times. (A-F or P/NP). (MJC Activities) Transfer: CSU, UC

THETR 175 — STAGE COSTUMING 3 Units
Principles and practice of theatrical costuming. Emphasis on the design of individual costumes and the coordination of an entire theatrical production. Field trips may be required. Lecture/Laboratory/Other. Not offered every semester. (MJC Activities) Transfer: CSU, UC

THETR 178 — INTRODUCTION TO SCENERY DESIGN 3 Units
Recommended for Success: Satisfactory completion of THETR 100
Introduction to the art and practice of scenery design for the stage. The process of design, selection of proper materials, safety aspects of scenery, physical, and psychological considerations of designing scenery for the stage. Practical application will include assisting in the design and execution of scenery for an actual production. Field trips may be required. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC

THETR 182 — PRACTICAL STAGE LIGHTING 3 Units
Recommended for Success: Satisfactory completion of THETR 100
An introduction to the art and practice of lighting design for the stage. Lectures will include: the use and control of stage lighting instruments, choosing color, basic electricity, the physical and psychological properties of light as applied to stage illumination. Practical application in lab work will include assisting in the design of an actual production. Field trips may be required. Lecture/Laboratory. Not offered every semester. Transfer: CSU, UC
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>THETR 183</td>
<td>FUNDAMENTALS OF STAGE MAKE-UP 1</td>
<td>1</td>
<td>Fundamentals of basic two-dimensional stage makeup: types of stage makeup, features of the face and proportions, highlights and shadow, stylized types of characters including Peking opera, animal, old, and fantasy. Materials fee required. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 184</td>
<td>FUNDAMENTALS OF STAGE MAKE-UP 2</td>
<td>1</td>
<td>Fundamental concepts of three-dimensional stage makeup and special effects. Topics include materials for special effects, negative and positive molds, aging techniques, and making latex pieces. Lecture/Laboratory. Three maximum completions. Materials fee required. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 185X,A</td>
<td>BEGINNING MODERN DANCE</td>
<td>½,1</td>
<td>Emphasis on basic modern dance technique, beginning composition, improvisation, dance history and philosophy. Dance as an art form and recreation. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 186X,A</td>
<td>INTERMEDIATE MODERN DANCE</td>
<td>½,1</td>
<td>Emphasis on intermediate modern dance technique, intermediate composition, improvisation, partnering, dance history and philosophy. Dance as art form and as recreation. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 187X,A</td>
<td>ADVANCED MODERN DANCE</td>
<td>½,1</td>
<td>Recommended for Success: PE 123X, A. Emphasis on composition, improvisation, expression, dance history and philosophy, an outlet for expressive movement ideas. Four completions allowed. (A-F or P/NP) Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 188</td>
<td>JAZZ DANCE</td>
<td>1</td>
<td>Technique of Jazz Dance with explorations into contemporary derivations of jazz. Emphasis is given to technical style of this form, and to the interrelationship of music and movement. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 189</td>
<td>BALLET 1</td>
<td>1</td>
<td>Fundamental ballet techniques and terminology. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
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<tr>
<td>THETR 190A,B</td>
<td>THEATRE PRODUCTION WORKSHOP</td>
<td>1,2</td>
<td>A repeatable, multi-technical course focusing on the practical aspect of mounting and running a theatrical production. The different areas of construction and run crews involved are: sets, sound, lighting, properties, costumes, stage management, publicity, and house management. Four maximum completions. Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 192</td>
<td>REHEARSAL &amp; PERFORMANCE</td>
<td>2</td>
<td>Participation and instruction in rehearsal and performance of a role in an MJC production. Required activities may include all aspects involved in the production of plays as well as rehearsal. Field trips required. Four maximum completions. Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 194</td>
<td>INTRODUCTION TO WORLD DANCE</td>
<td>3</td>
<td>A survey of dance and its development as an art form through social, political and cultural context. Investigation of cultural traditions and styles, values, aesthetics and mores will be explored. Field trips required. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)</td>
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<tr>
<td>THETR 195</td>
<td>MOVEMENT FOR THE PERFORMING ARTIST</td>
<td>3</td>
<td>Introduction to the fundamentals of movement as applied to body awareness, motor efficiency, and basic compositional components. Exploration of qualities and dynamics in performance through technique, improvisation, and compositional studies. Field trips required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU, UC</td>
</tr>
<tr>
<td>THETR 196</td>
<td>THEATRE MANAGEMENT</td>
<td>1</td>
<td>The principles of theatre management: front-of-house operations, box office management and theatre business procedures; publicity and public relations; budget and organization for school, community and professional theatre. Field trips may be required. Four maximum completions. Lecture/Laboratory. (MJC Activities) Transfer: CSU</td>
</tr>
<tr>
<td>THETR 197</td>
<td>BROADWAY/EUROPE THEATRE TRAVEL</td>
<td>1</td>
<td>Preparation and participation in theatre related trips to New York City and Europe. The trips include theatre performances, backstage tours of theatre facilities, workshop sessions with performers, directors, writers, critics and scholars. Program also includes tours of fine art exhibits, museums and other cultural events. Field trips are required. Four maximum completions. Lecture/Laboratory. Participation fees are paid to travel agencies approved by Yosemite Community College District. Cost for each trip varies. (Spring) (MJC Activities) Transfer: CSU</td>
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**TUTOR** (Tutoring)

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUTOR 50</td>
<td>TUTOR SEMINAR</td>
<td>2</td>
<td>Non-degree course. Designed for students to strengthen their effectiveness as tutors. Development of techniques of the tutoring process. Further development of strategies in the area of preparation, short and long-term planning, probing skills, critical thinking, study skills, and test-taking skills. Introduction to cultural understanding. Study of issues affecting tutors and students. Intended for students selected as tutors for the general campus. One completion allowed. Lecture/Laboratory. (P/NP Only)</td>
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**NON-CREDIT COURSES**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
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<tbody>
<tr>
<td>TUTOR 810</td>
<td>TUTOR TRAINING</td>
<td></td>
<td>Designed as an introduction to the tutoring process. Introduction to preparation, expectations, probing skills, situations, and application of the learned techniques Courses intended for students selected as tutors at MJC. Lecture/Laboratory.</td>
</tr>
<tr>
<td>TUTOR 850</td>
<td>SUPERVISED TUTORING FOR STUDENTS</td>
<td></td>
<td>Provides for individual learning by students with expressed needs in study skills, learning modes, and developmental materials. Learning experiences will be under instructional supervision. Open entry/open exit.</td>
</tr>
</tbody>
</table>

**TV**

For Television Production course offerings, please see RATV (Radio/Television)
VOCWE 349 A,B,C,D—WORK EXPERIENCE  1,2,3,4 Units
Prerequisite: Enrollment in a minimum of 7 units which may include Cooperative Work Experience and completion of or concurrent enrollment in one core or elective course in designated program.

Designed for students who wish to combine classroom experience with an expansion of skills or knowledge acquired at a site of employment on a paid or volunteer basis. Work must directly relate to the student's area of study. Conversely, students should have a designated area of study demonstrated by completion of or concurrent enrollment in at least a minimal number of courses in that designated program. Sixteen maximum units in any combination of vocational work experience courses. Lecture. Lab. 75 paid hours or sixty unpaid hours of related work experience per semester equals 1 unit.

WELD 200—ARC & GAS WELDING  3 Units
Introduction and basic instruction in theory and techniques in oxyacetylene welding and cutting and shielded metal arc welding. Safety and machine operation in the welding shop will be presented in lecture as well as "hands on" laboratory experiences. Field trips may be required. Welding rod required. Lecture/Laboratory. Transfer: CSU, A-F Only

WELD 204—GAS METAL ARC (MIG) AND FLUX CORE ARC WELDING (FCAW)  3 Units
Prerequisite: WELD 200
Formerly listed as WELD 202.
Welding stainless steel, aluminum, and ferrous metals using the Metallic Inert Gas (MIG)/Flux Core Arc Welding (FCAW) processes. Qualification procedures for the American Welding Society (A.W.S.) D1.1 certification for mild steel and aluminum. Field trips may be required. Lecture/Laboratory. Welding rod required. Transfer: CSU.

WELD 206—GAS TUNGSTEN ARC WELDING (TIG)  3 Units
Prerequisite: WELD 200
Formerly listed as WELD 202.
Advanced arc welding procedures for stainless steel, aluminum, and ferrous metals utilizing the gas tungsten arc welding (TIG) process. The American Society of Mechanical Engineers (A.S.M.E.) certification qualification procedure. Field trips may be required. Lecture/Laboratory. Welding rod required. Transfer: CSU.

WELD 300—INTERMEDIATE WELDING  3 Units
Prerequisite: WELD 200
Intermediate level instruction in the application of S.M.A.W. (Shielded Metallic Arc Welding) and oxy-fuel cutting equipment, testing procedures and tolerances to meet A.W.S. (American Welding Society) and A.S.M.E. (American Society of Mechanical Engineers) codes. Course provides additional skill building preparatory to certification coursework. Field trips required. Welding rod required. Lecture/Laboratory.

WELD 325—DESIGN AND FABRICATION PROCESSES  3 Units
Prerequisite: WELD 200 and 204.
Theory of drawing to include techniques of sketching out ideas through the development and layout of final blueprints. Estimating cost including the selection of appropriate materials and fabrication processes. Projects are required. Two maximum completions. Field trips may be required. Lecture/Laboratory. (A-F Only)

WELD 340—PIPE WELDING  3 Units
Prerequisite: WELD 200 and 300.
Introduction to general pipe fitting, welding procedures, applied layout and fit-up techniques. Field trips required. Three maximum completions. Lecture/Laboratory. Welding rod required. Not offered every semester.

Two Work Experience programs are offered: General Work Experience and Vocational Work Experience. Employment may be on a paid or volunteer basis and may be at work sites on or off campus. For General Work Experience, please see WKEX (Work Experience, General).

Designed to provide extended learning opportunities in students’ chosen occupational fields, Vocational Work Experience programs become practical laboratories for reinforcing in-school training. Students should consult their advisors to determine divisional practice on work experience units acceptable toward major requirements.

Vocational work experience classes are available in all discipline areas using the number 349 A,B,C,D (1-4 units) except Nursing (see Nursing Program). With the exception of Administration of Justice, Agriculture, Child Development and Nursing, Vocational Work Experience students must register for and attend VOCWE 349S. During the first lecture meeting, the instructor will assist the student in adding to his or her schedule the appropriate Vocational Work Experience class depending on the student’s academic goals and employment setting.

VOCWE 349S—VOCATIONAL WORK EXPERIENCE SEMINAR  0 Units
Designed to accompany vocational work experience courses in all discipline areas (with the exception of Administration of Justice, Agriculture, Child Development and Nursing). Provides an orientation to the structure of cooperative work experience education and develops specific knowledge and skills related to employment situations through the accomplishment of goals. Includes job applications, resumes, interpersonal relationships, career selection, and relevant employment laws, regulations and policies. Lecture. Non graded. Maximum completions as needed to accompany DIV 349 A,B,C, or D.

VOCWE (Work Experience, Vocational)
Modesto Junior College serves the needs of its students and those of the community through its Work Experience program. A program objective is to provide guidance and opportunity for career planning students in the real laboratory of the communities’ businesses, industries and public agencies. Work experience education results when it encompasses a systematic plan whereby students, while in college, gain realistic employment experiences through work.

WELD (Welding)
WKFSK 801—INTRODUCTION TO WORKFORCE DEVELOPMENT SKILLS
Training for employees on how to achieve success in any career situation. Explores elements of communication, team building, active listening and job retention skills. Open entry/open exit. Lecture. Field trips may be required. Four maximum completions.

WKFSK 802—THE ART OF ACTIVE LISTENING
Training for employees on maximizing the effectiveness of communication in the workplace and elsewhere. Explores helpful listening techniques, dealing with listening problems, and negotiating win-win situations. Open-entry/open-exit. Lecture. Field trips may be required. Four maximum completions.

WKFSK 803—TROUBLESHOOTING ON THE JOB
Training for employees on efficient and effective problem solving. Topics discussed include problem definition, finding the root cause, creating solutions, implementation of solutions and monitoring for success. Open-entry/open-exit. Lecture. Field trips may be required. Four maximum completions.

WKFSK 804—THE ART OF TEAMWORK
Training for employees on becoming a true “team player.” Topics covered include: team roles, facilitation, team communication, reaching agreements, team goal-setting, and effective leadership. Open-entry/open-exit. Lecture. Field trips may be required. Four maximum completions.

WKFSK 810—SKILLS FOR SUCCEEDING AT A NEW JOB
Intended for those just starting to work who are looking for skills to achieve success as a new employee. Explores in-depth job retention skills including job transition concepts, workplace expectations, customer service, attitude feedback and balancing work and personal life. Field trips may be required. Four maximum completions. Lecture.

WKFSK 820—APPLIED MATHEMATICS FOR THE WORKPLACE
An easy-to-use, computerized, open-entry/open-exit applied mathematics course. Methods to solve one-step mathematical operations and utilize these skills with work-related problems. Examples and situations focus on applying problem-solving skills in real-world situations. Uses a variety of interactive exercises so that the learner can practice each concept. A calculator function and formula sheet are available to the learner with a simple mouse-click. Detailed solutions to the problems are explained, allowing students to analyze their mistakes. A full human-voice sound track and immediate feedback aid learning. Non-graded. Approved only for online instruction.

WKFSK 821—LOCATING INFORMATION
An easy-to-use, computerized, open-entry/open-exit course. Develops skills in using information presented in workplace graphics such as memos, tables, charts, and graphs. Examples and situations focus on applying this ability in real-world situations. Uses a variety of interactive exercises so that the learner can practice each concept. A full human-voice sound track and immediate feedback aid learning. Non-graded. Approved only for online instruction.

ZOOL 101—GENERAL ZOOLOGY
Prerequisite: BIO 101
Principles of animal life and classification. Survey of major animal and protistaan phyla with emphasis on evolutionary relationships, structural and physiological adaptations and ecological importance. Field trips required. Lecture/Laboratory. Transfer: CSU, UC (CC BIOL 4) (TCSU BIOL SEQ A) General Education: (CSU-GE: B2, B3) (IGETC: SB)

ZOOL 110—ANIMAL BIOLOGY
A phylogenetic survey of animal life including structure and function, genetics, ecology, evolution, development and reproduction as they pertain to animals. Not open to students who have completed BIO 101. Not a substitute for ZOOL 101. Field trips may be required. Lecture/Laboratory. Transfer: CSU, UC General Education: (MJC-GE:A)(CSU-GE: B2,B3)
Success through the MJC Honors Program...

Travis Koch did not go to college after graduating from Turlock Christian High School in 1993, primarily because he was not sure what he wanted to study. Instead, when his parents moved to Montana, he followed them, and when his parents relocated back to the Turlock area a year later, Travis stayed in Missoula. He started his own residential remodeling business, met his wife, and started a family. He also became friends with several University of Montana graduate students; it was discussions with them that solidified his decision to study history. After 12 years in Montana, Travis sold his business, moved his family back to Stanislaus County, and enrolled at MJC in fall 2006.

With his sights set on transferring to a university, obtaining a graduate degree, and ultimately becoming a college history professor, Travis wasted no time in tackling his undergraduate studies. “When I came to MJC I was very focused. I knew what I wanted to major in and the classes I wanted to take.” He selected MJC because it was convenient, affordable, and familiar. However, he credits MJC with fine-tuning his educational direction. “MJC helped me refine my goals and consider how best to achieve them, and alerted me to potential career obstacles.”

Travis is naturally curious, and perhaps it is his inquisitive nature that drives his passion for delving into the past. He excelled in his academic endeavors, winning an achievement award in science and becoming the first student to enroll in MJC’s Honors Program. He was also one of four MJC students selected to present an honors project at the Bay Area Honors Research Symposium, hosted by Stanford University in April 2008. Travis became the first student to complete the Honors Program, transferring to Stanford in fall 2008 as one of only 20 transfer students admitted last year out of a pool of 1,200 applicants!

Not just a motivated student, Travis is a family man who works to balance his commitments as a husband and father alongside his studies. With his son and third child born just four days before his first honors class, he has little time for extra-curricular activities. However, when a free moment presents itself, he expands the collection of moths and butterflies that he has been gathering since he was five years old. He also enjoys traditional longbow archery, roasting his own coffee beans in a vintage hot-air popcorn popper, and reading, with his favorite authors being Mark Helprin and Fyodor Dostoyevsky.

Now a history major at Stanford, Travis remembers Professor Chad Redwing’s “Humanities in the Modern World” as one of the MJC classes he enjoyed most “because he’s a brilliant professor who is very engaging with students.” Travis is enthusiastic about his experience at MJC and identifies the closer interaction with professors as the major benefit provided by Honors participation. He is also complimentary of the diversity of programs offered at MJC. “Because of MJC’s recognition of the diverse needs of students and the community, almost anyone can have their educational needs met at the college.”

So what is this future professor’s recipe for college success? “Use the instructors’ office hours to talk with them and they will help you. Then, do your work! Don’t expect a free ride. They will help anyone who is committed and willing to work hard.”

“The professors are so helpful and interested in students being successful that if someone is willing to try the Honors Program, the instructors will strive to help them get through it.”

Travis Koch
Appendix
<table>
<thead>
<tr>
<th>Faculty and Administrators</th>
<th>(Date of appointment follows name.)</th>
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</thead>
<tbody>
<tr>
<td>Adams, Barbara (2005)</td>
<td>Speech Communication</td>
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<tr>
<td></td>
<td>B.A. California State University, Stanislaus</td>
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<td></td>
<td>M.A., California State University, Fullerton</td>
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<td></td>
<td>B.S., M.S., UC Irvine</td>
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<tr>
<td>Adler, Sue (1991)</td>
<td>Library Faculty</td>
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<td></td>
<td>B.A., University of Michigan</td>
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<td></td>
<td>B.S., Western Michigan University</td>
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<td></td>
<td>M.L.S., UC Los Angeles</td>
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<tr>
<td>Agostini, Susie &quot;Therese&quot; (1981)</td>
<td>Dean, Matriculation Admissions &amp; Records</td>
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<td></td>
<td>B.A., California State University, Fresno</td>
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<td></td>
<td>M.A., University of San Francisco</td>
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<tr>
<td>Aiello, Paul (1991)</td>
<td>Baseball Coach, Physical Education Instructor</td>
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<td></td>
<td>A.A., Modesto Junior College</td>
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<td>B.S., University of Oregon</td>
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<td></td>
<td>M.Ed., Chapman College</td>
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<tr>
<td>Akard, Michael (2001)</td>
<td>Computer Lab Instructor/Coordinator</td>
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<td></td>
<td>A.A. Modesto Junior College</td>
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<td>B.A., M.A., California State University, Fresno</td>
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<td>Alavezos, Kevin (2004)</td>
<td>Office Administration</td>
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<td>A.A., Reedley College</td>
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<tr>
<td>Anders, Bruce (2008)</td>
<td>English</td>
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<td>B.A., University of California, Santa Barbara</td>
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<td>Anelli, Bill (2005)</td>
<td>Philosophy</td>
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<td>B.A., University of California, Berkeley</td>
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<td>Anglin, Mark A. (1997)</td>
<td>Speech Communication</td>
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<td>Dean, Agriculture, Environmental Sciences &amp; Technical Education</td>
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<td>B.S., M.S., California Polytechnic State University, San Luis Obispo</td>
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<tr>
<td>Aristotelous, Steve (2005)</td>
<td>Women’s Soccer Coach</td>
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<td>Physical Education &amp; Health Instructor</td>
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<td>B.S., St. Mary’s College</td>
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<td>M.S., U.S. Sports Academy</td>
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<td>Backlund, Nancy (1998)</td>
<td>Office Administration</td>
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<td>B.A., California State University, Chico</td>
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<td>M.B.A., California State University, Stanislaus</td>
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<tr>
<td>Baggett, David W. (1994)</td>
<td>Ornamental Horticulture/Plant Science</td>
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<td>A.A.S., Ohio State University</td>
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<td>B.S., University of Arizona</td>
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<td>M.Ed. University of Massachusetts, Amherst</td>
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<td>Ed.D., University of Massachusetts, Amherst</td>
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<td>Bailey, Kimberly (2000)</td>
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<td>B.A., M.Ed., Northern Arizona</td>
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<td>Barr, Deborah (2004)</td>
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<td>Bartels, LeAnne (2002)</td>
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<td>B.S.N., California State University, Stanislaus</td>
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<td>Dean of Community Education and Economic Development</td>
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Brunn, Sandy (2004)  
Nursing  
B.S.N., Medical College of Virginia  
M.S. & P.N.P., University of California  
San Francisco  

Bryhni, Lori (2000)  
Performing Arts - Dance  
B.A., California State University, Stanislaus  
M.A., California State University, Long Beach  

Bucknam, Ines C. (1986)  
French  
A.A., Modesto Junior College  
B.A., California State University, Stanislaus  
M.A., University of California, Santa Barbara  

Butler, Kelly (2002)  
Nursing  
A.D.N., Chabot College  
B.S.N., California State University, Stanislaus  
M.S.N., California State University, Sacramento  

Buzbee, Shirley (1994)  
Medical Assisting  
A.A., Modesto Junior College  
B.S., University of San Francisco  

Director of Student Development & Campus Life  
M.B.S., Cameron University, Lawton, Oklahoma  

Caddell, Joseph (2005)  
Chemistry  
B.S., California State University, Stanislaus  
J.D., Golden Gate University  
Ph.D. University of California, Davis  

Carlstrom, Lisa (2008)  
Psychology/Human Sexuality  

Carroll, Iris (2000)  
Library Faculty  
B.A., Emory University  
M.L.S., University of North Texas  

Carter, Florine (2001)  
Humanities  
B.A., M.A, George Washington University  
M.A., California State University, Stanislaus  

Cavazos, Leticia (2000)  
Counseling  
A.S., Modesto Junior College  
B.S., University of San Francisco  
M.A., Chapman University  

Chapman, David (2001)  
Music  
B.A., Sacramento State University  
M.A., S.F. Conservatory of Music  

Christopherson, Michelle A. (1987)  
English  
A.A., Modesto Junior College  
B.A., University of California, Davis  
M.A., Sacramento State University  

Cipponeri, Charles J. (2000)  
Disability Specialist/Counselor  
B.A., San Francisco State University  
M.S., San Diego State University  

Circle, Shelley (2001)  
English  
A.A., American River College  
B.A., M.A., Sacramento State University  

Clarke, James L. (1985)  
Distance Education Coordinator  
Health, Respiratory Care  
A.A., Mt. Hood Community College B.A.,  
Sonoma State University  
M.S., San Francisco State University  

Clarke, Tobin D. (2006)  
Dean of Library, Learning Resources & Technology  
B.A., University of the Pacific  
M.L.S., University of California, Berkeley  
Ed.D., University of the Pacific  

Coats, Gloria (1993)  
Nursing  
B.S.N., California State University, Stanislaus  
M.S.N., California State University, Dominguez Hills  

Conrado, Todd (2005)  
Agriculture  
B.S., Cal Poly San Luis Obispo  
M.A., Cal Poly San Luis Obispo  

Contreras, Marcos A. (1991)  
Spanish  
B.A., M.A., San Diego State University  
M.A., University of California, San Diego  
Ph.D., University of California, Santa Barbara  

Articulation Officer  
B.A., California State University, Fullerton  
M.S., University of San Diego  

Cripe, Paul (2002)  
Mathematics  
B.S., Wheaton College, Illinois  
M.S., California State University, Hayward  

Crittenden, Pamela (1990)  
Counselor  
B.A., University of California, Berkeley  
M.S., San Francisco State University  

Curl, James C. (1968)  
Mathematics  
A.A., Modesto Junior College  
B.A., San Francisco State University M.S., University  
of Santa Clara  
Ed.D., University of Northern Colorado  

Curl, Sarah J. (1991)  
Mathematics  
B.S., University of Texas  
M.A., University of Texas  

Curtis, Teri (1996)  
Biology  
A.A., Modesto Junior College  
B.A., California State University, Fresno  
M.S., University of the Pacific  

Daly, Jillian K. (1998)  
English  
B.A., University of California, Berkeley  
B.A., M.A., University of California, Irvine  

Dambrosio, Ellen (2005)  
Library Faculty  
B.A., San Francisco State University  
M.A., California State University, Stanislaus  
M.L.I.S., San Jose State University  

DeAngelis, Adrian (2005)  
Technical Education  
T.S.E.D.C.A., O.R.T. Institute of Technology, Buenos Aires, Argentina  

Dhillon, Hardev (1996)  
Mathematics  
A.S., Yuba College  
B.A., M.A., Sacramento State University  

Droual, Robert (1998)  
Anatomy, Physiology  
B.A., Queens College, New York  
M.A., Fresno State University  
Ph.D., City University of New York  
D.V.M., Purdue University
Drummond, Frank J. (2000)  
Administration of Justice  
CA P.O.S.T. Certified  
A.A., Modesto Junior College  
B.A., St. Mary's College  
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Duchster, Hector M. (1996)  
EOPS Assistant Director  
B.S., M.A., College of Notre Dame

Duchscher, Lawrence Thomas (1988)  
Art  
A.A., Modesto Junior College  
B.A., M.A., California State University, Chico  
M.F.A., University of Washington

Ennis, Kathleen (1999)  
Library Faculty  
B.A., California State University, Stanislaus  
M.A., University College, Dublin  
M.L.S., San Jose State University

Fagin, Mara (1988)  
English  
B.A., M.A., Humboldt State University

Faris, Jacqueline (2001)  
Mathematics  
A.A., Modesto Junior College  
B.S., California State University, Stanislaus  
M.S., University of California, Davis

Fichtenkort, Shelly (2000)  
Psychology  
B.A., M.A., California State University, Stanislaus  
Ph.D. University of California, San Diego

Fischer, Eric (2005)  
PE/Water Polo & Swim Coach  
A.A., Modesto Junior College  
B.A., California State University, Fresno  
M.S.S., U.S. Sports Academy

Franco, Marianne (1987)  
Spanish  
A.A. Cuesta College  
B.A. University of California, Santa Cruz  
M.A., Ph.D., University of California, Berkeley

Ganes, Rebecca L. (1991)  
Psychology  
B.A., M.A., California State University, Stanislaus

Garcia, Alida (2000)  
EOPS Counselor  
A.A., Modesto Junior college  
B.S., University of San Francisco  
M.A., Chapman University

Garcia, Marcos C. (1991)  
Counselor  
A.A., Allan Hancock College  
B.A., California State University, Stanislaus  
RS P. Credential, San Jose State University  
M.A., San Jose State University

Gilbert, Deborah (2005)  
English  
B.A., University of California, Berkeley  
M.A., California State University, San Francisco  
Ph.D., Stony Brook University, New York

Girardi, Michael (2005)  
Health, Physical Education  
Coach, Women's Basketball  
A.A., Merced College  
B.A., Rice University  
M.S., University of Kansas

Glatt, Robert L. (1998)  
Culinary Arts  
B.S., University of California, Davis

Reading  
A.A., Foothill Junior College  
B.S., California Polytechnic State University, San Luis Obispo  
M.S., California State University, Stanislaus  
Reading Specialist Certificate, California State University, Stanislaus

Greene, Catherine (2001)  
Biology  
B.S., M.S., San Jose State

Griffiths-Bender, Wendy (2005)  
Library Faculty  
B.A. New Hampshire State College  
M.A., University of San Francisco  
M.L.S., University of California, Berkeley

Groth, M. Christine (2002)  
Office Administration  
B.A., Oklahoma State University  
M.B.A., Oklahoma City University

Guerra-Schmidt, Pamela (1999)  
Child Development/FCS  
B.A., M.S., California State University, Stanislaus

Gumm, Sonny C.  
Welding Technology  
A.A., Modesto Junior College  
B.V.E., California State University, Stanislaus

Guy, Todd G. (1992)  
Speech, Director of Forensics  
A.A., Diablo Valley College  
B.A., California State University, Long Beach  
M.A., San Francisco State University

Gyuran, Kimberly (1994)  
Speech, Organizational Communication  
B.S., Central Michigan University  
M.A., Wayne State University

Hagen, Joel (1997)  
Business, Computer Graphics  
B.A., California State University, Stanislaus

Hale, Eileen A. (1990)  
Nursing  
B.S., California State University, Hayward  
M.S., Marquette University, Wisconsin  
FNP, Sonoma State University

Hamilton, Jennifer (2008)  
English  
B.A., California State University, Stanislaus  
M.A., California State University, Long Beach

Hanlon, Dana (2005)  
Counselor  
B.A. University of California, Davis  
M.A., Sonoma State University

Hartman, Terry L. (1975)  
Art/Design/Computer Graphics  
A.A., Pasadena College  
B.S., California State University, Long Beach  
M.A., San Jose State University

Hausler-Akpovi, Annaliese (2000)  
English  
B.A., University of California, Berkeley  
M.A. San Francisco State University

Hausman, Gregory A. (2000)  
Administration of Justice  
CA P.O.S.T. Certified  
A.A., Merced College  
B.S., University of San Francisco

Hayes, Garry (1988)  
Geology  
A.A., Chaffey College  
B.A., Pomona College  
M.S., University of Nevada, Reno

Higginbotham, Richard D. (1968)  
History, Political Science  
B.A., University of San Francisco  
M.A., Stanford University
Administration of Justice
CA P.O.S.T. Certified
A.A., Modesto Junior College
B.A., M.A., California State University, Stanislaus

Hobby, Bill (2004)
Dairy Science
B.S., California Polytechnic State University, San Luis Obispo

Hobert, Timothy K. (1997)
English
B.A., M.A., University of the Pacific

Howen, James (2001)
Electronics
B.A., California Polytechnic State University, San Luis Obispo

Hudelson Putnam, Cecelia (1997)
Geography/Economic History
A.A., Modesto Junior College
B.A., University of California, Davis
Single Subject Credential, University of the Pacific
MSc, London School of Economics

Hughes, Noah (2005)
Earth Science
B.A., University of Colorado
M.S., University of Montana

Hulsey, Suzanne (2009)
Chemistry
B.S., Adams State College
M.S., Northern Arizona University

Hunt, Bonnie (2009)
A.S. Loma Linda University
B.S. California State University, Sacramento
M.P.A. California State University, Stanislaus

Hurst, RoseLee (1991)
English
B.A., Cosumnes River College
B.A., M.A., Sacramento State University

Hutchison, Bobby L. (1997)
Psychology
B.A., University of California, Santa Barbara
M.A., Sam Houston State University, Texas

Ivory, Eric Anthony (1997)
Counselor
A.A., College of Alameda
B.A., M.S., California State University, East Bay

Jarrett, Elzbieta B. (1992)
Mathematics
M.S., Wroclaw University, Poland
Ph.D, Western Michigan University

Jensen, Barbara (1999)
English
B.A., M.A., TESOL Certificate, California State University, Stanislaus

Mathematics
B.S., University of San Francisco
M.S., Idaho State University

Dean, Physical, Recreation and Health Education
B.S., West Virginia University
M.A., University of Northern Colorado
Ed.D., Temple University

Keller, Daniel (1996)
Music
B.M., Northern Arizona University
M.M., University of Oklahoma

Kennard, Kimberly (2001)
Human Services
B.A., University of California, Davis
M.S., Long Island University, C.W. Post Campus
D.S.W., City University of New York-Graduate School & University Ctr.

Keriotis, Dimitri (2000)
English
B.A., University of California, Santa Cruz
M.A., University of Nevada, Reno
M.F.A., California State University, Chico

Keriotis, Ingrid J. (2001)
English
B.A., The Evergreen State College
M.F.A., Eastern Washington University

Kerr, Eileen (2008)
History
B.A., California State University, Stanislaus
M.A., California State University, Sacramento
M.A., Yale University

Kerr, Susan (2000)
Anthropology
B.S., University of California, Davis
M.A., University of California, Santa Barbara
Ph.D., University of California, Santa Barbara

Kroll, Peggy (1994)
Director, Early College/Tech Prep 2+2
B.A., University of California, Berkeley
M.Ed, California State University, Stanislaus

Kropp, Jon (2000)
Industrial Technology
B.S., California State University, Chico

Accounting, Business
B.S., San Francisco State University
M.B.A., California State University, Stanislaus

Labrador, Philip
Respiratory Care Clinical Director
B.S., A.A.S., A.A.S., Southern Illinois University at Carbondale

Lafranchini, Deborah (2001)
Child Development
B.A., Humboldt State University
M.A., San Francisco State University

LaMont, Rose Marie (1992)
Economics
A.A., Cabrillo College
B.A., M.S., University of California, Santa Cruz

Lancaster Mingus, Carol (1994)
Telecommunications
A.A., Pima Community College
B.A., University of Arizona
Vocational experience 18 years

Lanigan, Elizabeth (1994)
Nursing
B.S.N., California State University, Stanislaus
M.S.N., California State University, Dominguez Hills

Larson, Brian (1994)
Computer Science
B.S., California State University, Stanislaus
M.S., California State University, Sacramento

Layne, Alan (1992)
Communication Graphics
B.S., California Polytechnic State University, San Luis Obispo

Llewellyn, Sharon (1997)
Music
B.A. Grand Canyon University
M.A. Arizona State University
D.M.A. Arizona State University
Louie, Donna (2005)  
Counselor  
A.A., San Joaquin Delta College  
B.S., California State University, Sacramento  
M.S., California State University, Sacramento  

Louie, Hanna (1999)  
Counselor  
A.A., San Joaquin Delta College  
B.A., California State University, Stanislaus  
M.S., Sacramento State University  

Lowry-Perez, Ann (2003)  
Interior Design  
B.S., University of the Pacific  
M.A., California State University, Stanislaus  

Counselor  
A.A., Modesto Junior College  
B.A., UC Santa Barbara  
M.A., Sacramento State University  

Astronomy, Physical Science  
M.S., University of Chicago  
B.A., Ed.D., U C Berkeley  

Luman, Ruth (1999)  
English as a Second Language  
B.A., M.A., TESOL Certificate, Biola University  

Lynch, Michael (1992)  
Theatre  
B.A., California State University, Fresno  
M.A., Northwestern University, Chicago  

Madden, Derek (1990)  
Biology  
B.A./B.A., M.A. California State University, Fresno  
Ph.D, University of South Africa  

Maki, Erik (2005)  
Biology  
B.A., California State University, Fresno  
M.A. University of Illinois  

Maki, Laura (1996)  
Chemistry  
B.S., California State University, Fresno  
Ph.D., University of California, Davis  

Malsam, Emily (2005)  
English  
B.S. North Dakota State University  
M.A. North Dakota State University  

Manner, Kimberly E. (1998)  
English  
B.A., University of Southern California  
M.A., University of Southern California  
Ph.D., University of Southern California  

Manzo, Laura (2005)  
Spanish  
B.A. San Diego State University  
M.A., University of California, San Diego  

Martin, Anne (2001)  
Music  
A.S., Santa Fe Community College  
B.M., New School of Music  
M.M., Yale University  

Martin, G. Daniel (1981)  
English as a Second Language  
B.A., UC Santa Barbara  
M.A., University of Illinois  

Martin, Harold Curtis (2000)  
History  
B.A., UC Berkeley  
M.A., ABD, University of California, San Diego  

Martinez, John (2004)  
Dean of Special Programs;  
DSPS, EOPS  
A.A., Cosumnes River College  
B.A., Sacramento State University  
M.A., Sacramento State University  

Business  
B.A., St. Joseph’s College, New York  
Graduate Certif. Philosophy/Theology  
Gregorian University, Rome, Italy  
M.A., Georgia State Univ., Atlanta  
M.A., Indiana University  
M.B.A., California State University, Stanislaus  
L.L.M., Golden Gate University  
J.D., University of Southern California  

McKinnon, Maurice  
Dean, Allied Health and Family and Consumer  
Sciences  
B.S.N., Florida A&M University  
M.A., University of Washington  
Ed.D., Oregon State University  

Mckissick, Allan D. (1981)  
Speech Communication  
A.A., Glendale Community College B.A., M.A.  
California State University, Los Angeles  

Meidl, Kenneth (1998)  
Physics  
B.S., California Polytechnic State  
University, San Luis Obispo  
M.S., California State University, Fresno  

Mendes, John A. (1991)  
Agriculture  
A.A., Modesto Junior College  
B.S., M.S. California Polytechnic  
University San Luis Obispo  

Mendes, Pedro (1994)  
Director of Technical Education  
B.A., California State University, Stanislaus  
M.A., George Washington University  

Merchant, Lee (1988)  
Psychology  
A.A., Modesto Junior College  
B.A., M.A., M.F.T., California State University,  
Stanislaus  

Metcalfe, Evelyn Elaine (1980)  
English as a Second Language  
B.A., University of California, Berkeley  
M.A., University of Hawaii  
Certificate, UC Los Angeles  

Michelena, Jaymes (2001)  
Math  
B.S., California State University, Stanislaus  
M.A., California Polytechnic State  
University, San Luis Obispo  

Miller, Steven (2005)  
Political Science  
B.A., Haverford College  
M.A., University of California, Berkeley  
Ph.D., University of California, Berkeley  

Mo, Eva (1999)  
History  
A.A., Chabot College  
B.A., University of California, Berkeley  
M.A., San Francisco State University
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<td>Philosophy</td>
<td>B.A., M.A., Ph.D., Tulane University</td>
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<td>Monlux, Michele</td>
<td>Biology</td>
<td>A.A., Chabot College B.A., M.A., University of California, Berkeley</td>
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<td>Morales, Michael</td>
<td>Agriculture</td>
<td>A.S. Kings River College B.S. California State University, Fresno</td>
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<td>Motroni, Milan</td>
<td>Health, Adaptive Physical Education</td>
<td>B.A., University of California, Davis M.A., University of the Pacific</td>
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<td>Mulder, Cheryl</td>
<td>Health, Physical Education, Coach</td>
<td>B.A., California State University, Stanislaus M.S., U.S. Sports Academy</td>
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<td>Mullins, Charles</td>
<td>Speech</td>
<td>B.A., California State University, Fresno M.A., California State University, Fresno</td>
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<td>Nadell, Robert</td>
<td>Vice President of Student Services</td>
<td>B.S., Cal Poly Pomona M.A., California State University, Los Angeles Ed.D., Argosy University</td>
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<td>Nanez, Estella</td>
<td>Counselor</td>
<td>B.A., M.A., San Jose State University CCC Counselor Credential CCC Limited Teaching Credential</td>
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<td>Netto, Jeffrey A.</td>
<td>English</td>
<td>Ph.D., University of California, Santa Barbara</td>
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<td>Netto, Jenny Tashjian</td>
<td>English</td>
<td>B.A., B.A., University of California, Santa Barbara M.A. California State University, Fullerton</td>
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<td>Newell, William D.</td>
<td>History</td>
<td>A.A., Bellevue Community College B.A., Washington State University M.A., Ph.D., University of Idaho</td>
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<td>Niazmand, Haleh</td>
<td>Art</td>
<td>B.A., University of South Dakota M.F.A., University of Arizona, Tuscon</td>
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<td>Nicoll-Johnson, Teri</td>
<td>Psychology</td>
<td>A.A., Rio Hondo College B.A., California State University, Fullerton M.A., San Diego State University</td>
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<td>Nidey, Bronda</td>
<td>Dental Assisting</td>
<td>A.A., Modesto Junior College A.S., Colorado Northwestern Comm. College, B.A., California State University, Stanislaus R.D.H., Registered Dental Hygienist</td>
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<td>Nomof, Thomas</td>
<td>Physics</td>
<td>B.A., University of California, Berkeley M.S., San Jose State University</td>
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<td>Olson, Kurt</td>
<td>PE Coach</td>
<td>B.A., University of California, Davis M.A., National University</td>
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<td>One, Optimism</td>
<td>English</td>
<td>A.A., Modesto Junior College B.A., University of California, Berkeley M.A., California State University, Stanislaus</td>
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<td>Onorato, Mary Alice</td>
<td>Nursing</td>
<td>A.A., A.S., Modesto Junior College R.N. State of California Certification in Gerontology, American Nurses Credentialing Center D.S.D., Dept. of Health Services, Sacramento</td>
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<td>Paull, Laura</td>
<td>Journalism</td>
<td>B.A., Vassar College M.A., Stanford University</td>
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<td>Payvar, Kamran</td>
<td>Mathematics</td>
<td>B.S., Teachers Training University M.S., California State University, Fresno</td>
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<td>Peek, Adrienne</td>
<td>English</td>
<td>B.A., M.A, California State University, Fresno</td>
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<td>Peterson, John</td>
<td>Automotive Technology</td>
<td>Vocational Experience, 18 years p/t Chabot/Las Positas 2 years</td>
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<td>Phillips, Dale</td>
<td>Computer Science</td>
<td>A.A., Modesto Junior College B.A., Western Illinois University M.B.A., University of LaVerne</td>
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<tr>
<td>Pierstorff, Samuel</td>
<td>English/Creative Writing</td>
<td>A.A., Orange Coast College B.A., M.F.A., California State University, Long Beach</td>
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<td>Pinckney, Jan</td>
<td>Auto Tech</td>
<td>A.A., Fresno City College B.V.E., California State University, Fresno National University Credential Program Teacher Training - University of California, Berkeley</td>
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<tr>
<td>Pollard, Dale</td>
<td>Agriculture</td>
<td>A.S., Modesto Junior College B.S., M.S., California Polytechnic University, San Luis Obispo</td>
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<td>Prusso, Laurie</td>
<td>Child Development</td>
<td>B.A., M.S., California State University, Hayward</td>
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<td>Rajagopal, Nivedita</td>
<td>English</td>
<td>B.A., Mangalore University, India M.A., San Jose State University</td>
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<td>Ramsey, Jill D</td>
<td>Nursing</td>
<td>A.A., Modesto Junior College B.S., Psychology, University of California, Davis B.S., Nursing, Loyola Univ. of Chicago M.S., University of California, San Francisco</td>
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<tr>
<td>Redwing, Chad</td>
<td>Humanities</td>
<td>B.A., Arizona State University M.A., University of Chicago</td>
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<td>Riggs, Lisa A.</td>
<td>Nursing</td>
<td>B.S.N., California State University, Stanislaus M.S.N., California State University, Dominguez Hills</td>
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<tr>
<td>Rivera-Jara, Eva</td>
<td>Counselor</td>
<td>A.A., Modesto Junior College B.A., San Diego State University M.A., University of LaVerme</td>
</tr>
</tbody>
</table>
Robles, Martha (1986)
Director Student Success & Special Projects
A.S., Modesto Junior College
B.A., University of San Francisco,
M.A., California State University, Stanislaus

President, Modesto Junior College
B.A., San Francisco State University
M.S., California State University, Hayward
M.A., San Jose State University
Ed.D., University of San Francisco

Roslaniec, Mary (2001)
Chemistry
Ph.D., University of California, Los Angeles
Postdoctoral Training, Los Alamos National Laboratory
Bar Ilan University, Tel Aviv

Sabre, Alejandro (1998)
Music
D.M.A., Eastman School of Music,
Rochester, NY
B.S., National University of Mexico
M.S., Carnegie Mellon University

Sahlman, James (1999)
Speech
A.A., Modesto Junior College
B.A., California State University, Stanislaus
M.A., University of the Pacific
Ph.D., Ohio University

Salazar, Roman S. (1973)
Business
A.A., Eastern Arizona Junior College
B.S., Northern Arizona University
M.S., Utah State University

Sanders, Brian K. (1995)
Mathematics
B.S., University of California, Santa Barbara
M.A., University of Oregon

Scheg, Lawrence (2000)
Reading
B.A., Niagara University
M.A., Western Connecticut State College

Schmidt, Cynthia D. (1996)

Scully, Dorothy L. (1980)
Reading
B.A., UC Los Angeles
M.S., California State University, Fullerton

Art History
A.A., Modesto Junior College
B.A., Ph.D., UC Santa Barbara

Shea, Mary (2001)
Health, Physical Education
Coach, Cross Country, Track & Field
B.S., Michigan State University
M.S., Eastern Michigan University

Shook, Burt (2005)
EOP&S Counselor
A.A., L.A. Pierce Junior College
B.A., California State University, Northridge
M.A., University of the Pacific

Short, Kathy (1977)
Computer Graphics/Computer Science
B.A., California State University, Fresno

Shrock, David L. (1997)
Health Education
B.A., M.A., San Jose State University

Sill, Nancy (2000)
Accounting
B.S., California State University, Stanislaus
Certified Public Accountant
MAOL, Chapman University

Silva, Mary (1997)
Counseling
B. Ed., St. Patrick’s College, Dublin, Ireland
M.A., California State University, Chico
J.D., Cal Northern School of Law, Chico

Sinclair, Brian (2005)
Computer Graphics
A.A., Modesto Junior College
B.F.A. Art Center College of Design
M.A., Chapman University

Smadihammer, Michael (2000)
English
A.A., Santa Rosa Junior College
B.A., University of California, Berkeley
M.A., Ph.D. University of New Mexico

Smith, Al (1994)
History
A.A., Fresno City College
B.A., M.A., California State University, Fresno

Smith, Ann (2000)
English
B.S., Univ. of Wisconsin, Milwaukee
M.A., University of Hawaii

Smith, E. Denise (1992)
English
A.A., Modesto Junior College
B.A., M.A., California State University, Stanislaus

Photography
B.A., University of California, Davis
M.F.A., California College of Arts & Crafts

Snaer, Demetrius (2008)
Physical, Recreational, and Health Education
Coach, Cross Country, Track Coach
B.A. California State University, Fresno
M.A. Fresno Pacific University

Sola, John (2003)
Fire Science
B.A. San Joaquin Delta, Stockton
Master Fire Instructor, California State Fire Training

Spector, Stanley J. (1986)
Philosophy
B.A., M.Ed., Loyola College, Baltimore M.A., Ph.D.,
University of Colorado

St. Urbain, Barbara (1998)
Counselor
B.G.S., M.A., University of Iowa

Steiner, Gabriele (1991)
German / ESL
Literature & Language Arts
B.A., University of Klagenfurt, Austria
M.A., UC Irvine

Stevens, Jim (2000)
Physical Education; Football Coach
A.A., American River College
B.S., M.S., California State University, Hayward

Stevenson, Robert (2001)
Art
B.A., University of California, Berkeley
M.F.A., S.F. Art Institute

Strangio, Michael (1981)
English as a Second Language
B.A., College of Notre Dame
Certificate in TESOL, University of California, Los Angeles
M.A., University of San Francisco

Stroud, Stephen (1980)
Music
A.A., Modesto Junior College
B.A., University of California, Los Angeles
M.S., Ed.D., University of Illinois,
Urbana-Champaign
Sundquist, Michael (1988)
Dean, Arts Humanities and Communications
A.A., Crafton Hills College
B.A., M.F.A., UC Irvine

Sweeney, Richard A. (1967)
Sociology
B.A., M.A., San Jose State University

Mathematics
B.S., University of California, Santa Barbara
M.A., University of California, Santa Barbara

Thorpe, Dennis (2005)
Architecture
B.S. California Polytechnic State University
P.E., Civil Engineer
P.E., Structural Engineer

Tingley, Ronald R. (1971)
Counselor
A.A., Modesto Junior College
B.A., M.S., San Jose State University

Todd, James (2006)
Anthropology
B.A., New College of Florida
M.A., The George Washington University
M.A., University of California, Santa Cruz

Tsuruda, Dean Y. (1975)
Counselor
B.A., Occidental College
M.S., California State University, Los Angeles

Upton, Pamela (1990)
Anatomy and Physiology
A.A., A.S., Merced Community College
B.A., University of California, Davis
M.A., California State University, Fresno

Uyeshiro, Sandra (1981)
Anatomy and Physiology
B.A., Bellarmine University
M.S., Purdue University

Vallee, Lillian (1991)
English
A.A., College of San Mateo
B.A., M.A., Ph.D. University of California, Berkeley

Vaughan, Timothy (1996)
Industrial Electronics
B.S., California State University, Stanislaus

Vaughn, Christopher (1999)
Computer Science
B.S., California State University, Stanislaus

Vaught, Lloyd C. (1982)
Computer Science
B.A., Missouri Valley College
M.S., Central Missouri State University
M.S., University of California, Berkeley

Walters Dunlap, Karen (2007)
Vice President, Instruction
B.S., Sonoma State University
Ph.D. University of California, Davis

Ward, David G. (1992)
Anatomy and Physiology
B.A., California State University, Stanislaus
Ph.D., University of Oklahoma, Health Sciences Center
Postdoctoral Certificate, The Johns Hopkins University
School of Medicine

Nursing
Nursing Diploma, Providence
College of Nursing
B.S.N., California State University, Stanislaus
M.S.N., California State University, Dominguez Hills

Waring, Derek (1995)
Counseling, Dean of Student Services
A.A., Modesto Junior College
B.A., California State University, Stanislaus
M.A., University of San Francisco

Weaver, Jeffery L. (1989)
Machine Tool Technology
A.A., Modesto Junior College
B.V.E., California State University, Stanislaus

Wells, Barbara (1981)
Sign Language
A.A., Modesto Junior College
B.A., California State University, Stanislaus
M.A., California State University, Fresno

Wells, Barbara (B.J.) (2001)
ESL
B.F.A., University of Connecticut
M.S.C., Aston University, Birmingham, U.K.

Westrope, Theron K. (1999)
English
B.A. University of the Pacific
M.A. University of the Pacific
Ph.D. University of Louisiana at Lafayette

White, Kenneth B. (1996)
Dean, Business, Behavioral, Social Sciences
A.A., Merritt College
B.A., California State University, Chico
M.A., Florida State University
Ph.D., University of Arizona

Williams-Jackson, Cheryl (2005)
Child Development
A.A., Hartnell College
B.A., M.A., California State University, San Jose

Wilson, Jeremy I. (2005)
Engineering
B.S., California State University, Fresno
M.S., California State University, Davis

Wohlstadter, Jason (2005)
English
B.A., University of California, Davis
M.A., UC Irvine
Ph.D., UC Irvine

Wong, B. Linda (1994)
Counselor
A.A., Contra Costa College
B.A., California State University, Chico
M.S., University of LaVerne

Woodside, Sandra (2000)
Sociology
B.A., University of Maryland
M.S., Drake University

Wray, Gerald (2006)
Technical Education
M.S.C., The Queens University of Belfast, Northern Ireland

Ye, Xiang-Dong (2001)
Mathematics
M.S., Ph.D., University of Iowa

Young, Sam C. (1996)
Physical Education
B.A., University of California, Davis
M.S., Sacramento State University

Yousif, Layla (2007)
Counselor
A.A., Modesto Junior College
B.S., California State University, Stanislaus
M.A. California State University, Stanislaus
M.A., Mills College

Zamora, John A. (2001)
Computer Science
A.S., College of the Sequoias
B.S., California State University, Fresno
Faculty Emeriti

Adams, Shirlee D. 1971-2003
Art

Articulation Officer

Ahrens, Donald 1969-2004
Earth Science, Meteorology

Albani, Jack P. 1969-1997
Physical Education Coach

English

Alvarez, Juan 1971-2004
Counseling, Dean of Student
Services

Alves, Ronald 1974-2004
Agriculture

Biology

Andrews, Howard 1975-1985
Automotive

English

Ard, Gary L. 1971-2007
Golf Coach

Physical Education Instructor

Ashleigh, Dave 1971-2004
Physical Education, Math

Ashworth, Frank (1992-2004)
Public Safety

Azevedo, John 1970-1999
Biology

Basey, Harold 1965-1996
Biology

Bates, June 1944-1952; 1960-1978
Art

Bates, Raymond E. 1959-1978
Art

Burns, Ronald D. 1972-1991
Administration of Justice

Byrne, John E. 1967-1992
Economics, History

Cardoza, George 1981-2004
Agriculture

Carlson, Irene 1956-1979
Home Economics

Carlton, Hal 1971-1997
Agriculture

Clark, Donald 1971-1999
Behavioral & Social Sciences

Clowers, Burl 1965-1995
Electronics

Collins, J. Stephen 1965-2002
Vice President of Instruction

Collins, Linda 1984-2004
Speech

Conway, Tom 1985-2004
Physical Education

Cook, Edgar 1966-1990
Business

Cordell, Associates 1968-1991
Administration of Justice

Costello, Bonnie 1992-2009
Nursing

Davis, Donald 1974-2000
Business

Dawson, Anita 1975-1990
Nursing

Diers, Andrew V. 1955-1972
Engineering

Draper, Lowell A. 1965-1993
English

Dutton, Ann 1979-1999
Family & Consumer Sciences

Eagan, Beverley F. 1975-1993
Allied Health

Eckle, Thomas 1974-2001
Dean, Business, Behavioral & Social Sciences

English

Elam, Robert V. 1969-1998
History, Anthropology

Elms, Stan W. 1962-1992
Zoology, Biology; Senior Curator, Great Valley Museum

Espino, Frank Jr. 1960-1976
Agriculture

Ewing, Charles 1990-2009
Speech, Communication, Forensics

Faulkner, Lloyd E. 1968-1981
Dean, Arts, Humanities and Communication Division

Fernandez, Horacio 1962-1987
Spanish

Fischer, Harry L. 1947-1972
Engineering; Department Chairman

Fisher, Charles E. 1960-1990
Counselor

Fisher, Pamila 1979-2004
Chancellor, Yosemite Community College District

Freeman, Darlene L. 1965-2003
Business

Galloway, Julia 1982-1996
Foods and Nutrition

Gauvreau, Bob 1974-2002
Dean of Instructional Services

Gonsalves, Claire 1964-1985
Nursing

Chemistry

Green, Jack Byron 1961-1991
Spanish

Mary Ann Greenwood 1975-2004
Counselor

Hacker, Mary Lou 1973-2006
Human Services

Hagen, Henry 1957-2002
English

Hamblin, Darwin 1965-1985
Coordinator of CETA Education Programs

Hanna, Jean G. 1958-1984
Business

Hansen, Lynn M. 1968-2001
Biology

Havens, Richard A. 1964-1980
Agriculture

Heinisus, John J. 1979-2004
Business

Henline, Horace 1973-1985
Assistant Dean, Admissions and Records

Hickman, Richard 1990-2003
Mathematics

Hilsabeck, Robert L. 1968-1993
Auto Body

Hinchei, Gwendolyn 1966-1988
Nursing

Hodge, Douglas 1975-1996
Dean, Physical, Recreational and Health Education

Hodges, Stanley L. 1965-1995
President

Hoegh, Bob 1961-1990
Physical Education

Holberg, Katherine P. 1964-1982
Assistant Librarian

Electronics

Hornberger, Nan 1974-1998
Sociology

Hsuan, Wei 1966-1993
Mathematics
Hulst, Dorothy C.  
1961-1979  
Home Economics

Jensen, Gwendolyn  
1966-1985  
Music

Johnson, James L.  
1969-2007  
Speech

Johnson, Odessa P.  
(1970-2001)  
Dean, Community and Economic Development

Johnson, Ralph E.  
1946-1975  
Physical, Recreation, Health Education

Jones, William A.  
1971-2003  
Business

Juergenson, Yancey  
1977-2004  
Agriculture

Juette, Helen  
1966-1985  
Nursing

Karnopp, Anna  
1980-1992  
Nursing

Keach, Robert M.  
1991-2007  
Dental Assisting

Kelly, J. Russell  
1968-2001  
English

Kerr, Robert T.  
1970-1994  
Behavioral and Social Sciences, Division Dean

Kidd, Marsha  
1979-2000  
Health and PE Coach

Kline, Roberta  
1988-2004  
Child Development

Knapp, C. William  
1955-1978  
Business

Knies, Donald  
1976-1991  
Counselor

Lomax, Brian  
Electronics  
1986-2004

Loyd, Richard  
1966-1996  
Physical Education

Ludlow, Jim  
1955-1978  
Speech

Lundberg, Donald L. V.  
1965-1976  
Counselor

Lyle, Terry  
1983-2007  
Program Director, Respiratory Care Program

Manha, Vivian  
1959-1985  
Dean of Instruction

Manrique, Julius C.  
1973-1997  
Assistant Dean, Student Services

Manzo, Ronald D.  
1968-1996  
Vice President of Instruction

Martinez, Desdemona  
1989-2007  
High Tech Specialist, DSP&S

Mayhew, Lewis B. Jr.  
1973-2004  
Counseling

McCablist, Alice D.  
1953-1968  
Nursing

McCallum, William J.  
1956-1965  
Science; Counselor

McCarty, Edward L.  
1948-1981  
Speech, Telecommunications

McLeod, Wilma J.  
1990-2004  
Vice President, Student Services

McCullough, Richard A  
1974-2000  
Administration of Justice

Merryman, Mary Alice  
1968-1996  
Reading

Moncrief, Lawrence  
1972-1992  
Administration of Justice

Montalbano, James  
1984-2005  
Computer Science

Moore, Ralph  
1961-1992  
Computer Science

Morris, Bernard E.  
1972-2003  
English

Morrow, Marilyn M.  
1955-1979  
Physical Education

Mortensen, Barbara  
1967-2002  
Health, Physical Education

Mudie, John  
1963-1996  
Physics

Muncill, Kathleen E.  
1966-1991  
Medical Assisting

Murov, Steven L.  
1979-2006  
Chemistry/MAPS

Murray, Maurice N.  
1950-1964  
Business

Nash, John D.  
1965-1993  
History

Neumann, Paul R.  
1968-1997  
English

Nicewonger, John  
1979-2006  
Agriculture

Nicholas, Dorothy F.  
1965-1977  
Reading and Study Skills

Nicholson, Coy Lee  
1965-1997  
English

Nimphius, Richard F.  
1980-2006  
Agriculture & Environmental Sciences

Nylander, Selma  
1969-1977  
Dental Assisting

O'Boesky, Julia  
1983-1990  
Dean, Health Occupations

O'Connor, Michael  
1977-2005  
Chemistry

Ogawa, Sayuri E.  
1979-2002  
Family and Consumer Sciences

Olmstead, Mrs. Helen E.L.  
1946-1964  
English

Onorato, Daniel S.  
1969-2006  
English, Spanish

Ortega, Augusto  
1972-1997  
Auto Technology

Ortega, Jose F.  
1977-1999  
Business

Ottoboni, Lorraine  
1965-1992  
Business

Overgaard, Nels, Jr.  
1973-1993  
Dean, Business

Palmie, B. Jeanne  
1983-2004  
Automotive Technology

Pekul, Sue  
1977-2004  
Office Technologies

Person, Pauline M.  
1962-1974  
Nursing

Petersen, Carole  
1989-2004  
Counselor

Petersen, John Walter  
1983-2007  
Auto Body

Petersen, Daniel W.  
1967-2003  
Art

Pham, Le-Huong  
1981-2007  
Librarian

Phillips, Gary J.  
1959-1998  
English

Pollard, C. Les  
1950-1983  
Business

Raduechel, Robert D.  
1983-2004  
Automotive Technology

Railege, Peter  
1971-2004  
English

Ralph, Helen  
1965-1985  
Home Economics

Reeves, William  
1965-1997  
Counseling

Reilly, Jerry M.  
1968-2003  
Art

Remsing, Joseph Gary  
1971-2004  
Art

Reynolds, Leo  
1970-1988  
Music

Rhodes, Richard  
1973-2003  
Behavioral Social Sciences
Richina, Richard R.  
1968-1990  
Automotive Technology

Rissi, Doris D.  
1964-1987  
Nursing

Roach, Dudley  
1970-1993  
Assistant Dean of College Services

Robert, Brenda  
1997-2007  
Dean, Literature & Language Arts

Rodgers, Raymond M.  
1961-1980  
Agriculture

Rolfe, Robert W.  
1950-1978  
Business

Ross, Mary P.  
1960-1993  
Physical, Recreation and Health Education

Sargis, Samuel  
1959-1993  
Mathematics

Schechter, Joseph A.  
1975-1999  
Assistant Librarian

Scheuber, Pius J.  
1968-1993  
Agriculture

Schwark, Louis  
1956-1981  
Work Experience

Sensenbaugh, Dean  
1956-1985  
Physical Education; Coach

Shannon, Almetta  
1989-2004  
Nursing

Shaw, Kathleen G.  
1982-2002  
English

Shelton, Mary Rose  
1985-1995  
Health Services Coordinator

Shuler, Dorothy L.  
1957-1970  
English

Sieffkin, Randolph R.  
1970-2001  
Political Science

Sielicki, Hilda  
1992-2007  
School Nurse

Sigmond, Patricia E.  
1974-2001  
Nursing

Sims, Odette P.  
1962-1993  
English; Folklore

Smith, Ron  
1979-1996  
Biology

Smith, Wilma  
1947-1984  
Counseling

Smykal, Anthony, Jr.  
1960-1993  
Learning Skills/Counseling

Spidell, William  
1966-1991  
Counselor

Stanley, Elaine S.  
1946-1948; 1959-1975  
Art

Starr, Benjamin S.  
1970-2002  
Philosophy

Steinhoff, Richard  
1970-1994  
Mathematics

Stephens, Leonard  
1974-1997  
Welding

Sternberg, Morris  
1946-1963  
Science

Stone, Duane  
1978-2004  
Architecture

Streeter, Gerald  
1964-1991  
Physical Education, Coach

Swanson, Carol  
1991-2002  
Nursing

Talbot, Carl  
1971-1988  
Speech

Thompson, A. Lance  
1974-1999  
Dean, Science, Math & Engineering

Thompson, Lucille  
1969-1985  
Nursing

Top, Darrell  
1968-2003  
Mathematics

Trimble, William C.  
1968-2000  
English as a Second Language

Turner, N. Edmund  
1965-1984  
Electronics

Tye, Elizabeth  
1960-1985  
Home Economics

Valaa, Geraldine  
1969-1985  
Dental Assisting

Van Dyken, Marian J.  
1967-1988  
Mathematics

Van Wagner, Richard  
1969-1989  
English

Wait, D. Dwight  
1957-1979  
Ornamental Horticulture

Walter, Alta M.  
1962-1973  
Nursing

Waterman, David J., Jr.  
1953-1980  
Psychology

Watson, Sharon  
1973-2004  
Office Technologies

Weese, Larry R.  
1972-2007  
Architecture

Weller, William A.  
1969-1999  
Business

Wellman, Thora L.  
1965-1975  
Health Occupations, Department Chairman

Whaley-Hartman, Charmaine  
1990-2007  
Counselor

Whaley, Harold C.  
1964-1993  
Agriculture

Wieber, Delores  
1979-1991  
Nursing

Wightman, Wayne  
1971-2004  
English

Williams, Juanita J.  
1966-1983  
Nursing

Williams, Robert C.  
1975-2008  
Counselor

Wilson, Lynda L.  
1983-2007  
Nursing

Wilson, E. William  
1980-2005  
Computer Science

Wilson, Marian  
1976-1991  
Nursing

Wiinikka, Peter G.  
1976-2000  
Physics

Wood, Edward D.  
Science

Woodward, Cyrus E., "Sid"  
1965-1988  
Speech

Woodward, Lewis  
1974-1997  
Music

Woodward, Pauline E.  
1963-1990  
Nursing

Woodward, Shirley  
1975-1998  
Music

Zehnder, John F.  
1968-1993  
Learning Skills
GLOSSARY OF COLLEGE TERMS

A.A.: ASSOCIATE IN ARTS: General degree granted by California Community Colleges. See Instructional Programs for requirements.

A.S.: ASSOCIATE IN SCIENCES: General degree granted by California Community Colleges having more emphasis on two-year vocational training than the A.A. degree. See Instructional Programs for requirements.

ADVISOR: An instructor who assists students in developing a program of study within a major. Contact major division office for advisor assignment.

ADVANCED STANDING: Classification of student who has had previous college work.

BACHELOR'S DEGREE: Degree granted by four-year colleges. Usually the Bachelor of Arts (B.A.) or the Bachelor of Science (B.S.).

CERTIFICATES OF ACHIEVEMENT: An award in recognition of successful completion of specialized work in a targeted career or skills area.

CLASS SCHEDULE: The listing of courses including hours, instructors, and room assignments to be offered each semester.

COMMUNITY EDUCATION CLASSES: Fully fee-funded vocational and recreational classes. These classes carry no credit value.

COUNSELOR: A person qualified to assist students with personal, career, vocational and educational planning and development.

CREDIT (graded) COURSE: Course for which units are granted. At MJC, any course numbered 1 through 399.

PASS-NO PASS GRADING: A grading system allowing a course to be taken for a grade of PASS or NO PASS, rather than for a letter grade of A,B,C,D,F. See Academic Regulations for details. Formerly referred to as “CREDIT/NO CREDIT” or CR/NC.

EDUCATIONAL PLAN: A plan listing courses required to meet a student’s educational goal.

ELECTIVES: Courses elected by the student which do not fulfill any specific requirement but provide units toward the degree.

GENERAL EDUCATION OR BREADTH: Courses required of all degree candidates regardless of their major to assure a broad education. These differ for the A.A. and A.S. degrees and for transfer. See Instructional Programs for specific requirements.

GRADE POINT AVERAGE (G.P.A.): The average of a student’s grades. See Academic Regulations for method of computation.

IGETC: Acronym for Interssegmental General Education Transfer Curriculum. See p. 78.

LDTP: Lower Division Transfer Program (LDTP) is a program sponsored by the California State University (CSU) System. An LDTP agreement may be entered into by the student with a particular CSU campus/major to receive the highest priority for admission. Students can enter into agreements effective SPRING 2010.

TCSU Number: Identification numbers assigned to MJC courses which have been reviewed and approved by CSU discipline faculty for the LDTP Program.

LOWER DIVISION: The first two years of college work, i.e., freshman and sophomore years, for a bachelor’s degree. By law only lower division work can be offered at a community college.

MAJOR: The major field of study a student plans to pursue e.g., biology, nursing, etc.

MATRICULATION: A process that enhances access to the college and promotes students to reach their educational goals successfully.

NON-CREDIT (ungraded) COURSE: Course for which no units are given. At MJC, any course numbered 800-999.

PREREQUISITE: A requirement which must be completed prior to enrollment in a course. If required, it is listed in the course description. See section on Courses.

SEMESTER UNIT: In general, a semester unit represents 1 hour of lecture or 3 hours of laboratory per week for a semester. Graduation requires 60 semester units. One semester unit is equivalent to one and a half quarter units.

TRANSCRIPT (of record): Copy of student’s college record prepared by the Record’s Office.

UPPER DIVISION: The last two years of college work, i.e., junior and senior years and/or courses. Upper division work is not offered.
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