ACADEMIC CALENDAR

2011-2012

ACADEMIC CALENDAR

SUMMER TERM 2011

May 30  Memorial Day  (College closed)
June 6  Summer Term begins
July 4  Independence Day (Observed)  College closed
August 13  Last day of Summer Instruction

FALL SEMESTER 2011

August 29  Fall Semester begins
September 5  Labor Day  (College closed)
September 11  Last day to drop full-term class and be eligible for a refund
September 25  Last day to withdraw from full-term class without a W
November 11  Veterans Day  (College closed)
November 17  Last day to withdraw from a full-term class
November 23  Evening classes held
November 24-25  Thanksgiving break  (College closed)
December 12-17  Final examinations week
December 17  Last day of Fall Instruction

SPRING SEMESTER 2012

January 9  Spring Semester begins
January 16  Martin Luther King Jr holiday (College closed)
January 22  Last day to drop full-term class and be eligible for a refund
February 5  Last day to withdraw from full-term class without a W
February 17  Lincoln Day (College closed)
February 18-19  No classes
February 20  Washington Day (College closed)
March 2  Last day to apply for Associate Degree or Certificate of Achievement to have name in commencement program
April 2  Last day to withdraw from a full-term class
April 23-28  Final examinations week
April 28  Graduation
April 28  Last day of Spring Instruction

LEGEND
4  Classes in session. Offices open
19  Classes in session. College offices closed.
20  No classes. College offices open.
1  Holiday. College closed.
27  Final examinations.
16  Last day of the term. Classes end.

* Most summer classes begin.
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.

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

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.

Own your future.
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Yosemite Community College District

BOARD OF TRUSTEES

Don Viss
Oakdale, Trustee Area 2

Lynn Martin, Ph.D
Sonora, Trustee Area 1

Anne DeMartini
Patterson, Trustee Area 4

Linda Flores
Modesto, Trustee Area 5

Tom Hallinan
Modesto, Trustee Area 5

Mike Riley
Modesto, Trustee Area 5

Abe Rojas
Turlock, Trustee Area 3

(Vacant)
Student Trustee (through May 2011)

DISTRICT ADMINISTRATION

Dr. Joan Smith (Interim)
Chancellor

Diane Wirth
Vice Chancellor, Human Resources

Tim Nesmith
Director of Facilities Planning & Operations

Teresa Scott
Executive Vice Chancellor, Fiscal Services

Nick Stavrianoudakis
Director of Public Affairs

Gina Rose
Assistant Chancellor, Information Technology

Modesto Junior College

Dr. Gaither Loewenstein
President

Dr. Karen Walters Dunlap
Vice President, Instruction

Dr. Don Low (Interim)
Vice President, Student Services

Dr. Carmen Fernandez (Interim)
Vice President, College & Administrative Services

Dean Tsuruda (Interim)
Dean of Student Services

Martha Robles
Dean of Matriculation, Admissions, & Records

George Boodrookas
Dean of Community Education & Economic Development/Executive Director, MJC Foundation

(Vacant)
Dean of Library, Learning Resources & Technology

(Vacant)
Dean of Instructional Services

(Vacant)
Dean of Special Programs
Overview of Modesto Junior College

Everything you need to know about MJC

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
Welcome to Modesto Junior College

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 each semester. 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.

MJC: A Comprehensive Community College

Consistent with its philosophy of serving the educational needs of all people who reside in the College district, a wide range of programs and individual courses have been developed. MJC offers technical and vocational programs, courses to prepare students for transfer to a four-year university, and Associate degrees in over 70 areas of study. MJC also provides basic skills courses in English and Math, and English as a Second Language classes.

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 streaming video. 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.

Accreditation

Modesto Junior College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949, (415) 506-0234 by the authority of the U.S. Department of Education. Accreditation provides assurance that education earned is of value to the student; acceptable to employers, trade or profession-related licensing agencies; and other colleges and universities can accept a student’s credential as legitimate.

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 2006, 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: 17.18%
Transfer Rate: 11.86%
Fall 2006 - Spring 2009 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 2006 to Spring 2009. Students who have completed 60 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 2007 to Spring 2009, are transfer students. (Updated 2/2011). ♦
Courses and Academic Programs at MJC

The Morris Building on MJC’s East Campus is home to many administrative offices and student services, including the Counseling Center.

Office of Instruction

Karen Walters Dunlap, PhD  
Vice President of Instruction  
Morris Memorial Building, 205 A  
(209) 575-6058, FAX: (209) 575-6050

Ruth Cranley  
MJC Articulation Officer  
(209) 575-6713

Support Staff  
Amy Bethel, Executive Secretary  
Sean Fornelli, Administrative Assistant  
Letitia S. Miller, Curriculum Process Specialist

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

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 or an associate’s degree. 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, forensics, 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 that 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, and 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 occupational 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 offers associates in arts or associate in science degrees upon completion of a set program of study, usually done in two years (full-time), 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 12-60 and are offered in many areas such as agriculture, supervisory training, real estate, 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 5½ 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 can 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 requirements for this degree (page 171), 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.

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 MJC or any catalog in effect thereafter through and including the semester when the student petitions for graduation or transfer certification.

CONTINUOUS ENROLLMENT AND CATALOG RIGHTS

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 MJC transcript (A through F, P/NP, I, W) shall constitute a record of continuous enrollment. Continuous enrollment is defined as 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.

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 methods of instruction. 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.
**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 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 Numbers Defined**

<table>
<thead>
<tr>
<th>Course Numbers Defined</th>
<th>Description</th>
</tr>
</thead>
<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](http://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 topics or problems 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 traditional types of independent study courses (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 on HECCC Articulation Grids that can be found at [http://www.csustan.edu/admissions/transfer/curriculararticulation.html](http://www.csustan.edu/admissions/transfer/curriculararticulation.html).

**RECIPROCITY OF GENERAL EDUCATION REQUIREMENTS**

General Education (GE) breadth courses that have been completed 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 & Economic Development

Dean, George Boodrookas, boodrookas@mjc.edu (209) 575-6714

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.

Workforce Training Center
Pedro Mendez, Interim Dean
West Campus, El Capitan Center,
Phone: (209) 575-6386
Email: mendezp@mjc.edu
Website: www.mjc.edu/community/training/wtc

The Modesto Junior College Workforce Training Center assists the college in reaching its mission of enhancing economic development and life-long learning in our community through the following programmatic areas: Accelerated Careers in Technology, Corporate Training & Corporate College, the Grant Innovations Office, and International Contract Programs

ACCELERATED CAREERS IN TECHNOLOGY PROGRAM
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. Ask for the Accelerated Careers and Training Program for specialized technical education and training opportunities.

CORPORATE TRAINING & CORPORATE COLLEGE
Customized training and performance consulting services are provided at low cost for all sizes of businesses, government agencies and non-profits. 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.

GRANT INNOVATIONS OFFICE
The Modesto Junior College Grant Innovations Office is designed to enhance and sustain programs and services at Modesto Junior College through the development of additional grant funding sources for college priority activities in the areas of community development, economic development and workforce development. The Grant Innovations Office is here to develop Federal, State and Local grant proposals for both new and existing college programs and services as well as community partnership projects developed through the college processes.

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

The International Contract Programs Unit coordinates grant funds that 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 other international agencies to conduct specialized training programs for international students.

Community Education
East Campus, Morris Building, Room 204
Phone: (209) 575-6063
Email: mjccommunityed@mjc.edu
Website: www.mjc.edu/communityed

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 Community Education or visit the website.

Center of Excellence
West Campus, El Capitan Center
Phone: (209) 567-4943
Contact: marquezm@mjc.edu
Website: www.cccewd.net

MJC hosts one of four, 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.
Getting Started at Modesto Junior College

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

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
Applying for Admission to MJC

GETTING STARTED AT MJC

Admissions Office

Martha Robles
Dean of Matriculation, Admissions, and Records
Phone: (209) 575-6856, (209) 575-6013
Registration Hotline: (209) 575-6853
East Campus Admissions: Student Center
West Campus Admissions: Yosemite Hall, Room 147, Phone: (209) 575-7727
Help Desk: (209) 575-7800

Mailing Address:
MJC Admissions Office
435 College Avenue
Modesto, CA 95350-5800

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 and 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 the international student admission procedure.

How to Apply for Admission

Individuals who have never attended MJC as well as students who have not attended within the past year, must submit an Admissions Application via PiratesNet, the college’s on-line system on the Internet at www.mjc.edu. As soon as the application has been processed by the Admissions Office, new and 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. This information will be mailed only to the student’s personal email address.

STEPS FOR ADMISSION INCLUDE:

1. Complete the application for admission at www.mjc.edu
2. Submit any previous high school and/or college transcripts.
3. Apply for financial aid.
4. Set up college email account.
5. Complete the MJC assessment tests in English or ESL and math.
6. Participate in the orientation/advising process.
7. Register for classes and pay fees

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 to their official transcript. 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. These transcripts become the property of MJC and cannot be returned to the student, copied, nor forwarded to other colleges.

The MJC Records Office will accept hand-carried transcripts that are in an unopened and sealed envelope.

CONCURRENTLY ENROLLED COLUMBIA COLLEGE STUDENTS

Students who are concurrently enrolled at Columbia College and who wish to enroll at MJC should consult with the Columbia College Admissions Office. Columbia College Admissions staff will make arrangements with MJC for authorization. Columbia students may use Columbia College assessment scores and/or course completions to satisfy MJC assessment requirements. See “Intradistrict Course Equivalencies Between Modesto Junior College and Columbia College” on page 78.

California Residency Requirement

It is not necessary to be a resident of California (as defined in the Education Code) to attend MJC. New and returning students are classified as either a California resident or a California non-resident for out-of-state tuition purposes. In order to determine California residency during the application
process, students are sometimes required to submit copies of INS documentation or documentation proving physical presence and showing intent to make California their permanent residence. The burden of proof to establish residence is on the student. For more information, contact the Admissions Office in the East Campus Student Center (575-6853).

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 $204 per unit tuition, in addition to their other fees. Non-resident fees may be exempted for students who qualify under AB 540. For more information, see “Student Fees and Expenses” on page 26.

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 also prove “intent” to become a California resident. To prove intent, students who have lived in California fewer than two years must submit two proofs from the following list with their Admissions Application:

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

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/MIGRANT WORKERS
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.

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 AB540 (see below) 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.

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:

- The student must have attended a California high school for three or more years.
- The student must have graduated from a California high school or attained the equivalent thereof.
- In the case of a student without lawful immigration status, an affidavit must be filed with the college that indicates the student has applied for legalization or will do so as soon as the student is eligible to do so.

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 decisions will be final. International students whose visas preclude establishment of residency will not be granted an appeal. For questions about residency, telephone the Admissions Office: (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. The burden of proof to establish residency is on the student.

Admission of 7th and 8th Grade Students
(who are at least 14 years of age)
Advanced admission is granted for academically superior seventh and eighth 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), seventh and eighth 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 48880, 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 and eighth 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 Admissions Application, 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/superintendent, and proof that they have demonstrated an English 101 ability on the MJC Assessment Test. All students must satisfy class prerequisites, if necessary.

Seventh and eighth grade students who wish to enroll in more than 10 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 (11.5 units or more) will be required to pay their enrollment fees.

Home-study seventh and eighth 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 (see above) a certification letter (Private School Affidavit) from their County Schools’ Office or the State of California. Home-study seventh and eighth grade students who are at least 14 years old must also demonstrate an English 101 ability level by completing the MJC Assessment.

All seventh and 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 seventh and eighth grade students enrolling in college courses have the maturity to function effectively on a college campus. No special arrangements for additional supervision of undergrade 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, 9th-12th 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 48880, 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 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 to satisfy requirements at the high school.

Home-study students must include with their Admissions packet (see above) 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.

Early College Program at MJC
West Campus, Yosemite Room 118
Phone: (209) 575-7858

WHAT IS EARLY COLLEGE?

Early College at MJC works with teachers, counselors, principals, parents and students to help motivated high school students “jump-start” careers and college by enrolling in appropriate college courses while still in high school. Students may compress the time necessary to complete a college degree and count units to enhance registration priority when enrolling at MJC after high school. By enrolling in regular classes or in after-school or summer sessions, high school students gain important academic, recreational, and/or work readiness skills while earning college credits.

HOW TO PARTICIPATE

• For students attending one of the Early College High Schools on or near the MJC campus, students have the opportunity to earn college credits towards certificates, Associate’s degrees or transfer preparation while also completing their high school diploma.
• For students attending regular high schools, students work with their high school counselors to determine eligibility for advanced admission (readiness for academic or vocational college-level course, 3.0+ GPA, or special recommendation by high school principal or designee). Go to www.mjc.edu for more information.

2+2 Program
Yosemite Hall, Room 118 (formerly Sierra Hall 254)
Phone: (209) 575-7858

2+2 Articulation is a planned process for linking two or more educational systems through formal articulation agreements. Modesto Junior College (MJC) has established course agreements with many of our area high schools and Regional Occupational Programs (ROP). Students who successfully complete a 2+2 program are able to transition from their secondary institution to MJC without experiencing a delay or duplication of learning once they have completed requirements outlined in the agreement.

BENEFITS OF PARTICIPATING IN THE 2+2 PROGRAM

• Receive college credit for course work completed in high school. A student must complete a fall or spring semester at MJC after high school graduation before the articulated college credit is placed on his/her MJC transcript. Additional requirements exist for courses taken in Agriculture, Mathematics or Foreign Language.
• Receive priority registration. 2+2 students will register after continuing students, but prior to new and returning students.
• Use the 2+2 class in lieu of an MJC introductory course, which can save time and money.
• Use the articulated course work toward a certificate, AA/AS degree or transfer.

Admission of International Students

International Student Program
Barbara St. Urbain, Coordinator/Counselor
Counseling Services Office
East Campus, Morris Building, 103 (in Counseling Services), Phone: (209) 575-6012
Email: sturbainb@mjc.edu

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. Services such as admissions assistance, 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 international students upon arrival to MJC. Students are encouraged to visit the International Counselor, available in the Counseling Center.

Modesto Junior College welcomes qualified international (non-immigrant) students to its academic, vocational and technical programs. The college 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

GETTING STARTED AT MJC

GENERAL INFORMATION
GETTING STARTED AT MJC

- 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 go to www.mjc.edu/international or contact the coordinator of the program, Counseling Center, (209) 575-6080 or sturbain@mjc.edu.

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 Admissions 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 & Student Services and counselors. The student may be readmitted if there is strong evidence showing promise of success.

The Dean of Counseling & Student Services, and/or a 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 & Student Services. If the petition is denied, the student may apply for readmission after one year has passed since dismissal.

Numerous staff and faculty are available to help you reach your goals at MJC, and are always excited to attend to the needs of all students.
Assessment Process

MJC Testing Center
West Campus, Yosemite Hall, Room 147
Phone: (209) 575-7728, Information: (209) 575-6026
Website: www.mjc.edu/assessment

WHAT IS ASSESSMENT?
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. These tests are intended to measure skills which research has shown to be closely related to academic success. In combination with other measures, test results represent student strengths and capabilities.

WHY COMPLETE THE ASSESSMENT PROCESS?
Math and English/Reading or English-as-a-second language (ESL) assessments are required of ALL STUDENTS who are completing courses to earn an associate degree, certificate, transfer to a university, to improve job skills, 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 counselors and students in selecting the appropriate level of course work. 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, an 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 are welcome to take the assessment tests and to participate in the assessment process. See “Assessment Exemptions” on page 20 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.

MATHEMATICS ASSESSMENT
Students can choose from four exams from the Mathematics Diagnostic Testing Project:

- Level 1 - Basic Math Competency
- Level 2 - Elementary Algebra Competency
- Level 3 - Intermediate Algebra Competency
- Level 4 - Pre-calculus Competency

In order to assist in advising, retesting on lower exams may be required 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 (www.mjc.edu/assessment) for examples of test questions/problems.

ENGLISH AND READING ASSESSMENT
There are two sections that make up the English/Reading Accuplacer exam:

- Reading Comprehension
- Sentence Skills

Students who are taking the test for English advisory and placement 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. Check with a counselor for other program needs.

ESL ASSESSMENT (ENGLISH AS A SECOND LANGUAGE)
Students who plan to enroll in credit ESL classes must take the Accuplacer test (MJC ESL assessment) test prior to registration. The assessment consists of:

- Multiple choice tests on a computer;
- General information questionnaires

Students who plan to enroll in English for Life and Work courses (ESL 901-906 and ESL 01-06) must take the CASAS placement test.

Both tests are administered in the MJC Testing Center.
ASSESSMENT EXEMPTIONS

Students may be exempt from testing or they may 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 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 FOR ASSESSMENT TESTS

Students may retest one time 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 or
- Earned a "W" in an MJC English, reading, or math class

Challenging Prerequisites

Any student may challenge a prerequisite on the grounds that:

- It was not established in accordance with the District’s policy
- It is in violation of Title 5
- It is discriminatory
- You feel that you can succeed even though you have not completed the prerequisite
- 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 offering 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 filing the petition.

**MJC will celebrate 90 years of educational excellence beginning Fall 2011.**
Orientation and Advising

Orientation for New & Returning Students
For information contact us at: Website: www.mjc.edu, Phone: (209) 575-6789
All new and returning students, including special admits (7th-12th grade students), who do not have an associate 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.

Arrangements can be made for students with disabilities and limited English-speaking students who require accommodations. To make accommodations, students should request accommodations 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. Students who do not complete the required orientation activity or who do not complete a Matriculation Release form may forfeit their priority registration date and time.

ORIENTATION SCHEDULE
Orientation/advising workshops are scheduled before and during each new and returning student registration period. Go to www.mjc.edu/orientation to find current orientation/advising workshop sessions. Reservations are required. Service is on a first come first serve basis.

Planning Your Education with a Counselor

COUNSELING SERVICES
Dean Tsuruda, Interim Dean of Counseling and Student Services
East Campus, Counseling Center, Morris Memorial, 103, Phone: (209) 575-6080
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 meet 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 or call the Counseling Center. Students who are exempt from educational counseling are also welcome to meet with a counselor.

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 - International Students/New American Focus; Educational Planning; Career Awareness; Job Development Skills; Orientation for Re-entry Adults; Success Strategies for Transfer Students.

ACADEMIC ALERT
MJC Counseling sponsors a program called Academic Alert. This program provides intervention for students at the earliest signs of academic problems. Through Academic 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.
Registering for Classes

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 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.

Priority Registration Groups in Order of Priority
At MJC, the Priority Registration System* 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 completed admissions application is received, except that students who participate in special matriculation programs, such as StartSmart, may register earlier than those who do not participate.

*Currently under review by the college.

How to register
To register for classes, on the registration date/time provided to you, use PiratesNet at www.mjc.edu or go to the Admissions Office, either in the East Campus Student Center or West Campus Yosemite Hall. Make sure your class schedule is planned with alternative courses, in case your first choice is closed.

TO FIND OUT YOUR REGISTRATION DATE
Student registration dates and times are posted each term on PiratesNet during the following months; however, prior to being posted on PiratesNet, students will receive their registration date and time in an email sent to them at their PiratesLink e-mail address. All students are encouraged to activate their PiratesLink email account and to check if often. This is the only way MJC communicates with students. Activate your PiratesLink e-mail address at www.yosemite.edu/studentemail/.

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 that are still open, provided prerequisites have been met. 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 give the student an Add Card. Adds must be processed by the add deadlines.

All students at MJC can find assistance at the MJC Welcome Center. Here, a student finds out how to apply for financial aid.

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.

New and returning students receive their registration dates and times as soon as their admissions application is processed.

REGISTRATION BLOCKS (OUTSTANDING OBLIGATIONS)
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.
Wait Lists

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.

When classes begin, the students who are on a 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 or by taking the add card to the Admissions Office on either campus. Be sure to drop yourself from the wait list prior to adding the class.

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 Request 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.

Limitations on Enrollment

Some courses must restrict who may enroll in the course. Limitations on enrollment advise if or how students can qualify for a particular course or program. These limitations can apply to courses that include public performance or intercollegiate competition where a try-out or audition is necessary. Additionally, some courses require formal admission to a particular program in order to enroll (e.g., Associate Degree Nursing Program, Respiratory Therapy Program). Limitations on enrollment are enforced by the instructor. A student will be blocked from enrolling if the student does not meet the stated limitation (see below for challenge procedure).

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 in the course at MJC. “Satisfactory completion” means a grade of A, B, C, or CR/P (pass). Grades of D, F, or NC/NP indicate that the student did not satisfactorily complete the course, and therefore, cannot use the course to fulfill the prerequisite.

CHALLENGING PREREQUISITES

Any student may challenge a prerequisite on the grounds that:

- It was not established in accordance with the District’s policy
- It is in violation of Title 5
- It is discriminatory
- A student feels that they can succeed even though they have not completed the prerequisite (it is the student’s responsibility to provide additional documentation that demonstrates they have satisfied the prerequisite.)

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 check it 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 are 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. Most offices on campus have eliminated U.S. mail service and use PiratesLink exclusively to communicate with students.

It is the student’s responsibility to activate a 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
West Campus: Yosemite Hall, Room A133, Phone: (209) 575-7727

Persons who have met the limit of repetition for credit courses as stated in the catalog may audit the desired course. 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 verifies that the repeat limit has been reached. This form must be signed by the instructor. After the instructor has signed the Audit form it is taken to the respective Division Office for approval. If approved, payment of $15 per unit (additional fees may be assessed at the time of enrollment) needs to be paid at 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.

Repeating Courses

The Board of Trustees of the Yosemite Community College District has adopted a policy which permits a student to repeat certain courses. In these cases, a course is designated as repeatable in the college catalog, and a student may take the course and then repeat it the allowed number of times and earn college credit for each completion. These courses have been approved by the Curriculum Committee as repeatable. These courses are designated in the College Catalog as Repeatable. Courses without that designation may not be repeated. Repeatable courses may not be repeated to improve a substandard grade.
COURSE REPETITION FOR THE PURPOSE OF GRADE IMPROVEMENT

Per Title 5, Section 55042 and District Procedure on Repetitions, a student who has earned a grade of D, E, NC, or NP in a non-repeatable course taken in the Yosemite Community College District may repeat the course once for the purpose of grade improvement. This allows a student a maximum of two attempts to successfully complete the course. A “W” counts as the one attempt to improve the grade. The most recent completion (grade, grade points, and units) will replace the earlier course, even if the more recent completion results in a lower grade.

A student who fails a non-repeatable course two times must discuss enrollment possibilities with a counselor, Morris Memorial 103. Should a student be approved to enroll a third time, the counselor may require/recommend that student limit total units, participate in tutoring, or enroll in Supplemental Instruction classes. The third completion will replace the second completion, even if the third completion results in a lower grade.

Students may be approved to repeat a class after three attempts only if a documentable extenuating circumstance exists relating to the third enrollment. Examples of extenuating circumstances are accident, serious illness, death in the family, evidence of caretaking responsibilities, or a verified disability. Documentation is required to support circumstances that relate specifically to the dates of the last attempt. The petition to repeat due to an extenuating circumstance must be submitted within 30 days of the end of the term when the course was completed.

If there is no extenuating circumstance to support the fourth/fifth enrollment, a student’s request to repeat the class may be considered only if there are no other courses that could meet the requirement or need for the course. In order to be considered for a fourth or more repeat, student must have abided by all recommendations placed on the second and/or third enrollments (limiting units, tutoring, etc.). Students will be allowed to enroll in the class on a seats available basis only. The units, grade, grade points that may result from the fourth/fifth enrollment will not be used to replace the previous substandard completion. Title 5, section 55042 says that “no more than two substandard grades may be alleviated pursuant to this section.”

MULTIPLE AND OVERLAPPING ENROLLMENTS

MJC does not allow a student to enroll in two or more sections of the same credit courses at the same time.

- MJC does not allow a student to enroll in two courses that overlap (time-wise) unless the following requirements are met:
  - The student must provide sound justification for the overlap, other than mere scheduling convenience.
  - An appropriate college official must review the justification and approve the enrollment.
  - The instructor of record allowing the overlap must collect documentation each week that shows how the student made up the time caused by the overlap.

COURSE REPETITION WHEN THE STUDENT HAS EARNED A PASSING GRADE

Courses which have been completed with a passing grade may be repeated for the purpose of improving the grade or proficiency only in the following cases:

- If student has enrolled the maximum number of times allowed in an activity class, he/she may enroll one additional time, after a lapse of time of five years or more. The grade and grade points will replace the fourth enrollment, even if the grade is lower.
- Students may enroll in legally mandated training classes any number of times if the training requirements are mandated as a condition of paid or volunteer employment. The grade received each time shall be included for purposes of calculating the student’s grade point average. Legally mandated is interpreted to mean “required by statute or regulation.” Written verification from the employer is required.
- Student needs class completion within a specific time period to meet a recency prerequisite at MJC or at another institution where he/she intends to transfer.
- Student petitions that the grade (although satisfactory) was the result of an extenuating circumstance. An extenuating circumstance reason will only be accepted two times as a reason for repeat, whether the grade was satisfactory or unsatisfactory. The petition must be submitted to the college within 30 days from the end of the semester.

COURSE REPETITION IN ACTIVITY COURSES

Activity courses include physical education classes, visual or performing arts courses* in music, fine arts, theatre or dance, and career technical courses where the content differs each time the course is offered. When there are several levels of a course, such as beginning golf, intermediate golf, etc., the repetition limitation applies to ALL levels of courses. *Visual or performing arts courses in music, fine arts, theatre or dance, which are part of a transfer sequence, are not subject to this repetition limitation.

Attendance

Attendance is important. Students are expected to attend the first class meeting of each class in which they register. Instructors may drop students who do not attend the first class meeting and give the seat to a student from the wait list. All students enrolled at Modesto Junior College are expected to be punctual and attend classes regularly. Regular attendance in class and lab sessions is an obligation assumed by every student at the time of registration. Instructors are encouraged to announce to their students at the beginning of the semester their policies regarding excessive absences or tardiness.

Many instructors link their class syllabi to their directory information on PiratesNet. 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.

Determining 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. To maintain 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. Catalog rights begin with the first enrollment and continue as long as the student enrolls and earns college credit in at least one term of the school year. |
| NEW STUDENT | has never enrolled in a class at MJC and has applied to MJC. Catalog rights begin with the first enrollment and continue as long as the student enrolls and earns college credit in at least one term of the school year. |
Student progress at MJC is measured by the number of units completed.

- FRESHMAN has completed fewer than 30 units.
- SOPHOMORE has completed 30 or more units.

Determining 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: 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: 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, 35, 1606, 1607: Minimum 6 units required for assistance
- Veterans: Chapter 33: Minimum 7 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 towards 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.

WITHDRAWAL DUE TO EXTRAORDINARY CIRCUMSTANCES

Section 58509: Authority of Chancellor to Waive Provisions to Accommodate Students Impacted by Extraordinary Conditions

MJC will provide a full refund of enrollment fees to any student who withdrew from one or more classes, where the withdrawal was necessary for one of the following reasons:

- The college attended by the student was closed or the college was unable to provide all or substantially all of the instruction in the course in which the student was enrolled due to fire, flood or other conditions qualifying for adjustment of apportionment pursuant to section 58146; or
- Although the college attended by the student may not qualify for an apportionment adjustment pursuant to section 58146, one of the conditions enumerated in that section

Fire, flood, epidemic, or order of any military officer of the United States, or other extraordinary conditions made it difficult or impossible for the student to attend one or more courses because the student was actively engaged in responding to fire, flood or other condition or because such condition required the student to evacuate his or her home.

A “W” will not be recorded on the academic record of the student who withdraws from one or more courses due to the circumstances described above. The student will receive a full refund of enrollment fees.
## GETTING STARTED AT MJC

### Student Fees and Expenses

**MJC Business Services**  
East Campus, Student Center, Phone: (209) 575-6829  
West Campus, Yosemite Hall A133, Phone (209) 575-7754  
Student Fees and Expenses

<table>
<thead>
<tr>
<th>FEE NAME</th>
<th>EXPLANATION</th>
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<tbody>
<tr>
<td><strong>ENROLLMENT FEE:</strong></td>
<td>California residents must pay an enrollment fee of $26 per unit per semester subject to change by 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. Fee for 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. The maximum number of units that can be enrolled in any one semester is 12. Maximum enrollment of 13 units per semester. The international student tuition fee is $204 per unit per semester. The tuition fee is in addition to the Enrollment Fee and all other required fees. A $17 Health Fee must be paid each semester ($14 Summer) by students who are California residents. 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 level. 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 level. 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. Per Education Code Section 76355, fee subject to change by $1 based on the Implicit Price Index for State and Local Government Services. <strong>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.</strong></td>
</tr>
<tr>
<td><strong>MATERIALS FEES:</strong></td>
<td>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.</td>
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<tr>
<td><strong>OTHER EXPENSES:</strong></td>
<td>Textbooks, stationery and supplies will amount to approximately $200 to $600 per semester.</td>
</tr>
<tr>
<td><strong>TRANSCRIPT VERIFICATION:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>ENROLLMENT VERIFICATION:</strong></td>
<td>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.</td>
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<tr>
<td><strong>FIELD TRIP FEES:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>NOTE:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

**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 $204 per unit per semester. The international student tuition fee is $204 per unit per semester. The tuition fee is in addition to the Enrollment Fee and all other required fees.

**HEALTH FEE:**  
A $17 Health Fee must be paid each semester ($14 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 an on-campus contract education courses. The Health Fee may be waived for students who are indigent 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 76335, fee subject to change by $1 based on the Implicit Price Index for State and Local Government Services. **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.**

**STUDENT CENTER FEE:**  
Students voted in Spring 2000 to assess a Student Center fee of $1.00 per unit at a maximum of $10.00 per fiscal 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 26). 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 Print/Not 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.

**DEBT 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.
Refund Policy

Classes must be dropped at the Admissions Office or online at www.mjc.edu 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 prior to 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, 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.

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 FORFEITED.

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.

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:

<table>
<thead>
<tr>
<th>TYPE OF TRIP/TOUR</th>
<th>ADVANCED NOTICE FOR REFUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-day excursion</td>
<td>7 days</td>
</tr>
<tr>
<td>Pre-purchased tickets included</td>
<td>30 days</td>
</tr>
<tr>
<td>Overnight accommodations included</td>
<td>45 days</td>
</tr>
</tbody>
</table>

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

First Year Experience (FYE)

The First Year Experience (FYE) Program at Modesto Junior College is an exciting year long program for first time college students who welcome the support and assistance of navigating their college experience. Because MJC truly values students, the focus of the FYE program is to provide first time students with a comprehensive college experience that provides the necessary knowledge, skills, and resources that will foster success during the first year and beyond. Interaction and relationship-building opportunities with faculty, counselors, and peer mentors will facilitate and support the student’s academic, personal, and social transitions to their college environment. Both academic and non-academic active learning activities are designed to assist FYE students in making a successful transition to college in a welcoming and nurturing environment. For more information contact the FYE office at (209) 575-7790 or visit us in Yosemite room 118.
GETTING STARTED AT MJC

Financial Aid
Myra Rush, Director
Financial Aid Office (209) 575-7700
West Campus: Yosemite Hall, Room 147
Phone: (209) 575-7700, Fax:(209) 575-7719
Website: www.mjc.edu/financialaid

Financial Aid 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. 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.

The federal FAFSA and California BOGW are two resources eligible students may pursue to get financial assistance with college. For information on FAFSA, visit www.fafsa.ed.gov. Information on the BOGW is available in Financial Aid or the Welcome Center.

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
• meet satisfactory academic progress standards
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 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, eligible 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 to the student before the due date. 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 due 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 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 Federal Pell Grant Recipient
- be enrolled at least half time in a degree program or in a one- or two-year certificate program
- be enrolled in the first or second academic year of a 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 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
GETTING STARTED AT MJC

(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 who enroll full time during the Fall semester. Awards range from $200 to $2,000 per academic year. Students who will be new incoming or continuing can receive up to a maximum of $2500 and transfer students up to $3500. Scholarships are funded by the MJC Foundation, private donors, community agencies and businesses whose focus is to encourage and support the educational goals of the students we serve.

To receive consideration for scholarships, students must have completed 12 units with a cumulative grade point average of 2.5 or higher and be actively enrolled as a full-time student the following Fall semester. (Students accepted and enrolled in the MJC Nursing Program will be considered full time for scholarship purposes only.) High school seniors are exempt from the 12-unit completion, but must submit their high school transcript. Scholarship selections are made based upon proven academic performance and strength of major, motivation, potential for success and may include the following: major, residency, organizational affiliation and active community service.

The MJC Scholarship Application and Recommendation Form will be available on the MJC Financial Aid link (on line) at www.mjc.edu the first Monday in October and will be due the last Friday of finals week during the Fall Semester. High school seniors who will be new-incoming full-time freshmen during Fall semester will have until the second Friday in March to submit their applications.

For questions or more information regarding the MJC Scholarship Program, contact Melissa Clark in the Scholarship Office at (209) 575-7715 or email clarkme@mjc.edu.
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>GRADE POINTS EARNED</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>Good</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>Less than satisfactory</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Failing</td>
</tr>
<tr>
<td>P</td>
<td>*</td>
<td>Pass, at least satisfactory (A, B, C)</td>
</tr>
<tr>
<td>NP</td>
<td>*</td>
<td>No Pass, less than satisfactory or failing (D, F)</td>
</tr>
<tr>
<td>IA</td>
<td>*</td>
<td>Incomplete A</td>
</tr>
<tr>
<td>IB</td>
<td>*</td>
<td>Incomplete B</td>
</tr>
<tr>
<td>IC</td>
<td>*</td>
<td>Incomplete C</td>
</tr>
<tr>
<td>ID</td>
<td>*</td>
<td>Incomplete D</td>
</tr>
<tr>
<td>IF</td>
<td>*</td>
<td>Incomplete F</td>
</tr>
<tr>
<td>IP</td>
<td>*</td>
<td>Incomplete Pass (A, B, C)</td>
</tr>
<tr>
<td>INP</td>
<td>*</td>
<td>Incomplete No Pass (D, F)</td>
</tr>
<tr>
<td>W</td>
<td>*</td>
<td>Withdrawn</td>
</tr>
</tbody>
</table>

* Grade points not included in student’s overall GPA.

Challenging Grades
To conform to the provision of Section 55025 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 policies on challenging a final grade are as follows:
1. There shall be a one year time limit for challenging any evaluative or non-evaluative symbol. This limit will begin at the end of the term in which the symbol was assigned.
2. The correction of grades given in error shall include expunging the incorrect grade from the record.
3. To challenge a grade, students should complete the appropriate forms to challenge academic record symbols which are available in the Office of Student Success, Library Basement room 20.

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 as 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:
1. Will enter on PiratesNet the date on which the incomplete grade will end and the in lieu grade will be awarded.
2. Will enter on PiratesNet the date on which the incomplete grade will end and the in lieu grade will be awarded.
3. Will submit to the Records Office a written record (on the Incomplete Form provided) 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.
4. Will post the student's grade when all work has been completed on the Incomplete Form in the Records Office at least two days prior to the expiration date of the incomplete grade.
5. The amount of time that a student may have to make up the work cannot exceed one year.

If the student has not completed the conditions for removal, the Incomplete grade (I) will electronically revert 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. All prerequisite courses at MJC must be satisfactorily completed with a C or better grade.

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). The deadline to file P/NP for a full-term or short-term class is 30% of the class. If 30% falls on a weekend or holiday, 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/current/quickreferences/forms.html, unless the course otherwise states "GR" only or "P/NP" only, all courses are offered with a choice of letter grade or P/NP option. Once the P/NP option is selected by the student, the choice cannot be rescinded.

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 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 55022 Title 5)

CAUTION: Some schools may consider "NP" the same as "F".
GETTING STARTED AT MJC

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 in college degree applicable courses completed at MJC and other colleges divided by the total number of units attempted. Students planning to transfer to a four-year university should discuss options 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) 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 earned 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.

Progress Probation and Dismissal
A student shall be placed on progress probation if he or she has enrolled in a total of at least 12 semester units and the percentage of all units in which the student has enrolled, for which entries of “W”, “I” and “NP” were recorded reaches or exceeds fifty percent (50%).

A student who is on progress probation shall be subject to dismissal for one calendar year when the cumulative percentage of units in which the student has enrolled for which entries of “W”, “I”, and “NP” are recorded in at least three (3) consecutive semesters reaches fifty percent (50%) or more.

A student on progress probation shall be removed from probation when the percentage of units in the categories of “W”, “I”, and “NP” drops below fifty percent (50%).

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.

PRESIDENT’S LIST
To be eligible for the President’s List (formerly Dean’s List) the student must complete a minimum of 12 degree-applicable units in a semester at MJC and have a grade point average (GPA) of 3.5 or better with no grade lower than a C. The student receives a personal letter of commendation.

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.

Substandard work completed at MJC (grades of “D”, “F”, “NP”) may be removed from a maximum of two terms under the following conditions:

• A period of at least two years has elapsed since the work to be removed was completed.

• The work to be removed does not include courses previously used to establish eligibility for transfer, graduation, or certificates of achievement.

• A repeated course that has resulted in a satisfactory grade cannot be removed.

• 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.

• The terms need not be consecutive.

• 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 the conditions above, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a complete academic history.

Units of Credit at MJC
Units awarded for a course depend on the number of lecture, lab, and lecture/lab hours in the course. Typically, 17.5 hours of lecture with 35 additional hours of outside work, or 52.5 hours of lab produce one unit of credit. A student’s weekly workload for a full-semester course will be roughly three times the number of units of credit to be earned. So a
In accordance with District policy, official college transcripts received by MJC can be picked up in the Evaluations Office, Morris Building, Room 103. Lower division courses recommended by the service which are subsequently translated by a recognized transcript translation service recommended by Modesto Junior College does not evaluate international transcripts until they are 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 and cannot be returned to the student, copied, nor forwarded to other colleges.

### Acceptance of Credit from Institutions of Higher Learning Outside the the United States

Students who have completed college coursework at colleges and universities outside of the United States may be able to “transfer in” courses that are deemed comparable or equivalent to lower division courses offered at Modesto Junior College.

A student must first have their foreign coursework evaluated by a National Associate of Credential Evaluation Services (NACES) affiliated foreign transcript service. The Records Office in Morris Building 105 has a list of transcript services.

After a student completes a minimum of 12 units at either Columbia or MJC with a 2.0 or higher grade point average, the student can submit an International Transcript Course Equivalency Request. A maximum of 30 units can be accepted through this process. A student should meet with a counselor to determine if any of the courses taken may be equivalent to courses required on the student’s educational plan or may be needed as a prerequisite.

Because transcripts evaluated by NACE affiliated foreign transcript services contain brief titles, students should submit as much information about the classes they have completed as possible. They should include: course catalog descriptions, topics covered, course syllabi, lecture hours, lab hours, prerequisites the course may have had, or any other information available.

Evaluators will award course equivalency based upon the recommendation of the division. All grades of C or better will be converted to a Pass grade. These units will not be counted toward the student’s GPA.

Coursework taken outside the United States may not be used to satisfy the associate degree Reading and Written Expression or Oral Communication requirement. Possessing a foreign degree comparable to a bachelor’s degree or higher does not satisfy the general education, competency requirements, and guidance and activities requirement for an associate degree at 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 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

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

Upon Enrolling at MJC After Graduation

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

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:

- If the units granted for a course would cause the student to have completed more than 30 units of credit by examination
- For a course in which a student is currently enrolled
- For a course that is below the academic level of a course already completed
- For a course in which a student has received a grade, i.e. a “W” will be regarded as a grade.
- For a course in which the student has received Advanced Placement (AP) credit.

To Begin the Credit by Examination Process:

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 student will return the form 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.

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

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 to do a Credit by Examination 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.) For more information, see “Student Fees and Expenses” on page 26.

*Fee subject to change pending action by the CA State Legislature
International Baccalaureate (IB) Credit

Modesto Junior College recognizes a number of International Baccalaureate exams towards the fulfillment of MJC-GE, CSU-GE and IGETC patterns. Modesto Junior College will apply the following International Baccalaureate (IB) exams/credit toward CSU-GE and/or IGETC breadth pattern certification (per CSU Executive Order 1036, Section 1.2.4, and IGETC Version 1.2). The IB units earned will count toward an associates degree as elective units and satisfy MJC-GE.

**IB POLICY**

- Students must be enrolled at MJC in order to apply for unit credit for IB exams.
- Students will be granted unit credit for IB exam scores of four (4) or five (5) or six (6) or seven (7) toward the fulfillment of requirements reflected on the chart below.
- Unit credit earned through IB exams will be listed on the transcript based on the IB exam passed, e.g. IB Economics HL, 3 units, PASS.
- All CSU campuses will accept the minimum units shown toward the fulfillment of the designated general education breadth pattern if the exam is included in a full or subject area certification.
- Official score reports from the IB Program must be sent to Modesto Junior College, Attention: Vice President, Student Services. Official score reports can be requested at (212) 696-4464 EXT 1 or http://www.ibo.org/iba/transcripts/
- Only Higher Level (HL) exams can be used toward the fulfillment of listed requirements.

**FOUR-YEAR UNIVERSITY CAUTION**

The applicability & quantity of unit credit for IB exams granted toward admission, satisfaction of major, 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 IB exams.

**IB RESTRICTIONS**

- Unit credit for IB 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 IB exams will not be used to satisfy the college’s twelve-unit (12) residency requirement.
- Unit credit for IB exams will not be used to satisfy financial aid, veterans, or EOPS eligibility criteria regarding enrollment status.
- Unit credit for IB exams will not be used in lieu of MJC Assessment Tests for placement into courses with English, reading or math prerequisites. Students will need to go through the MJC Assessment process to enter courses appropriate for their skill levels.

![Note: The IB scores listed on the chart below reflect the minimum scores required to satisfy each area.](image)

**NOTE:** The IB scores listed on the chart below reflect the minimum scores required to satisfy each area.

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**IB EXAMINATION** | **COMPSC MET** | **MJC-GE Pattern** | **CSU-GE Pattern** | **IGETC Pattern**
--- | --- | --- | --- | ---

<table>
<thead>
<tr>
<th>IB SCORE</th>
<th>GE AREA</th>
<th>UNITS EARNED</th>
<th>IB SCORE</th>
<th>GE AREA</th>
<th>UNITS EARNED</th>
<th>IB SCORE</th>
<th>GE AREA</th>
<th>UNITS EARNED</th>
</tr>
</thead>
</table>

- **Biology HL (without lab)**
  - 5 A 3 5 B2 3 5 5B 3
- **Chemistry HL (without lab)**
  - 5 A 3 5 B1 3 5 5A 3
- **Economics HL**
  - 5 B 3 5 D2 3 5 4B 3
- **Geography HL**
  - 5 B 3 5 D5 3 5 4E 3
- **History (any region) HL**
  - 5 B or C1 3 5 C2 or D6 3 5 3B or 4F 3
- **Language A1 HL* (any language except English)**
  - 5 C 3 5 3B and 6A 3
- **Language A2 HL* (any language except English)**
  - 5 C 3 5 3B and 6A 3
- **Language A1 HL* (any language)**
  - 5 C 3 4 C2 3 5 3B 3
- **Language A2 HL* (any language)**
  - 5 C 3 4 C2 3 5 3B 3
- **Language B HL* (any language)**
  - 5 C 3 5 6A 3
- **Mathematics HL**
  - 5 D2 5 4 B4 3 5 2A 3
- **Physics HL (without lab)**
  - 5 A 3 5 B1 3 5 5A 3
- **Psychology HL**
  - 5 B 3 5 D9 3 5 4I 3
- **Theatre HL**
  - 5 C 3 4 C1 3 5 3A 3

* The IB curriculum offers language at various levels for native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers respectively.

**HL** “Higher Level” Exams only

**MJC Math Competency Met or Exceeded**

**IB Examinations may be used in either area regardless of where the certifying CCC’s discipline is located.**

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**Students wishing to use IB credit to satisfy MJC major or certificate course requirements may seek a course substitution from the division office offering the course. Students wishing to use IB credit to satisfy MJC course prerequisites, other than English and math, may submit a Prerequisite Challenge Petition to the division office offering the course.**

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*Revised 10/21/10 RAC/bs Approved by the MJC Curriculum Committee 01/09/10*
GETTING STARTED AT MJC

2011-2012 Advanced Placement (AP) Credit at MJC

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, unless otherwise stated.
- Unit credit earned through AP exams will be listed on the transcript based on the AP exam passed.
- 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 not satisfy the college's twelve-unit (12) residency requirement.
- Units earned by AP exams will not satisfy financial aid, veterans, or EOPS eligibility criteria.
- Official score reports from the College Board AP Program must be sent to Modesto Junior College.
- 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.
- Students will be granted unit credit for AP exam scores of three (3), four (4), or five (5) toward fulfillment of requirements reflected in the chart, unless otherwise stated.
- Students must be enrolled at MJC in order to apply for unit credit for AP exams.
- An AP Calculus AB or BC score of 3, 4, or 5 may be used to satisfy the prerequisite for courses requiring satisfactory completion of MATH 172 instead. Students wishing to start in MATH 172 will need to submit a petition and provide an explanation to the Science, Mathematics, and Engineering Division.

FOUR-YEAR UNIVERSITY CAUTION

The applicability & quantity of unit credit for AP exams granted toward admission, satisfaction of major, 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 satisfy the college’s twelve-unit (12) residency requirement.
- Unit credit for AP exams will not satisfy financial aid, veterans, or EOPS eligibility criteria regarding enrollment status.

Students wishing to use AP credit to satisfy MJC major or certificates course requirements may seek a course substitution form from the division office offering the course. Students wishing to use AP credit to satisfy MJC course prerequisites may submit a Prerequisite Challenge Petition to the division office offering the course.

### LEGEND

- **Units earned**
- MJC “Math” Competency Met or Exceeded
- MJC “Written Expression” Competency Met or Exceeded
- MJC “Activates Requirement” fulfilled (units earned as indicated)

### EXAM NAME

<table>
<thead>
<tr>
<th>EXAM NAME</th>
<th>UNITS EARNED</th>
<th>UNIT CREDIT EARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>C</td>
<td>3A or 3B</td>
</tr>
<tr>
<td>Biology</td>
<td>A</td>
<td>5B w/lab</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>D1</td>
<td>B4</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>D2</td>
<td>B4</td>
</tr>
<tr>
<td>Calculus BC (AB Subscore)</td>
<td>D2</td>
<td>B4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>A</td>
<td>5A w/lab</td>
</tr>
<tr>
<td>Chinese Language &amp; Culture</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Comparative Gov. &amp; Politics</td>
<td>B</td>
<td>4H</td>
</tr>
<tr>
<td>Computer Science A/B</td>
<td>D2</td>
<td>N/A</td>
</tr>
<tr>
<td>English Language</td>
<td>D1</td>
<td>A</td>
</tr>
<tr>
<td>English Literature</td>
<td>D1</td>
<td>A</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>A</td>
<td>5A w/lab</td>
</tr>
<tr>
<td>European History</td>
<td>C</td>
<td>3B &amp; 4F</td>
</tr>
<tr>
<td>French Language</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>French Literature</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>German Language</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Human Geography</td>
<td>B</td>
<td>4E</td>
</tr>
<tr>
<td>Italian Language &amp; Culture</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Japanese Language &amp; Culture</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Latin Literature</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>B</td>
<td>4B</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>B</td>
<td>4B</td>
</tr>
<tr>
<td>Music Theory</td>
<td>C</td>
<td>1A</td>
</tr>
<tr>
<td>Physics B</td>
<td>A</td>
<td>5A w/lab</td>
</tr>
<tr>
<td>Physics C: Electricity/Magnetism</td>
<td>A</td>
<td>5A w/lab</td>
</tr>
<tr>
<td>Physics C: Mechanics</td>
<td>A</td>
<td>5A w/lab</td>
</tr>
<tr>
<td>Psychology</td>
<td>B</td>
<td>4I</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>C</td>
<td>3B &amp; 6A</td>
</tr>
<tr>
<td>Statistics</td>
<td>D2</td>
<td>B4</td>
</tr>
<tr>
<td>Studio Art</td>
<td>D3</td>
<td>2A</td>
</tr>
<tr>
<td>U. S. History*</td>
<td>B</td>
<td>3D &amp; US-2</td>
</tr>
<tr>
<td>World History</td>
<td>C</td>
<td>3B &amp; 4F</td>
</tr>
</tbody>
</table>

*Does not contain the California State and Local Government Requirements (US-5) required for American Institution certification. Meet with a counselor for assistance.

1 Students seeking certification in GE breadth prior to transfer must have passed the exam 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 CEC’s discipline is located.
4 Students who pass AP Environmental Science earn 4 units of credit. Exams 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).
5 Students seeking certification in GE Breadth areas prior to transfer must have passed the exam before Fall 2010.
6 Exams taken before Fall 2009 earn 6 units of credit of CSU Breadth. Exams taken Fall 09 or later earn units reflected on the grid.

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

(Rev. 10/07/2010 MJC/TEM. Updated and approved by the MJC Curriculum Committee 10/12/2010.)
Applying for and Receiving Academic Awards

Evaluations Office:
East Campus: Morris Memorial Building, Room 107
Website: www.mjc.edu
Phone: (209) 575-6040

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 and General Education
(a) The governing board of a community college district shall adopt a policy which states its specific philosophy on General Education. In developing this policy governing boards shall consider the following policy of the Board of Governors:

The awarding of an Associate Degree is intended to represent more than an accumulation of units. It is to symbolize a successful attempt on the part of the college to lead students through patterns of learning experiences designed to develop certain capabilities and insights.

Among these are the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest.

Central to an Associate Degree, General Education is designed to introduce students to the variety of means through which people comprehend the modern world. It reflects the conviction of colleges that those who receive their degrees must possess in common certain basic principles, concepts and methodologies both unique to and shared by the various disciplines. College educated persons must be able to use this knowledge when evaluating and appreciating the physical environment, the culture and the society in which they live. Most importantly, General Education should lead to better self-understanding.

In establishing or modifying a general education program, ways shall be sought to create coherence and integration among the separate requirements. It is also desirable that general education programs involve students actively in examining values inherent in proposed solutions to major social problems.

(b) The governing board of a community college district shall also establish criteria to determine which courses may be used to implementing its philosophy on the associate degree and general education.

(c) The governing board of a community college district shall, on a regular basis, review the policy and criteria established pursuant to subsections (a) and (b) of this section.

Reaffirmed by the MJC Curriculum Committee, 1/25/2011

DIFFERENCE BETWEEN A.S. AND A.A. 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 or a counselor.

Applying for an Associate's Degree or Certificate of Achievement
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 the 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, graduating 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) 575-6700. 

GETTING STARTED AT MJC

GENERAL INFORMATION
Transcripts and Academic Records

Official Transcripts
East Campus: Records Office, Morris Building, Room 105, Phone: (209) 575-6018
Website: www.mjc.edu/current/quickreferences/transcriptrequest.html
Fax: (209) 575-6723

Modesto Junior College offers an online transcript request 24/7 process. All current and former students can order an official transcript at their convenience through the MJC website, www.mjc.edu. There are several types of processing options available. Check online at www.mjc.edu for details on how to have transcripts sent from MJC.

- Each transcript request must be submitted via the college website, or in writing by the student to the Records Office.
- Each transcript will include the student’s entire record of courses completed at MJC.
- Official transcripts or records earned at other institutions which have been presented for admissions or evaluations become part of the student’s permanent record and are not issued or copied for distribution.
- 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.

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.

Students are advised to submit previous high school and/or college transcripts as soon as they apply for admission to MJC. These transcripts become the property of MJC and cannot be returned to the student, copied, or forwarded to other colleges. The MJC Records Office will accept only transcripts that are in an unopened, sealed envelope.

The MJC Evaluations Office recommends that these transcripts be sent at least six weeks prior to registration. As soon as incoming transcripts can be processed, all lower division coursework will be evaluated to determine course equivalencies. At this time, students are not required to request the evaluation. It is automatic upon receipt of the transcripts. This important evaluation provides information to the student and counselor about how course work completed at other colleges and universities will be applied to:

- California State University General Education Certification
- Intersegmental General Education Transfer Curriculum
- MJC Associate Degree General Education requirements
- MJC major or certificate requirements

Report Cards
Report cards are not issued at MJC. Grades are posted online at www.mjc.edu, (select>Register, PiratesNet). As soon as instructors enter their grades and the Records Office verifies them, they are available at this site.

Enrollment and Grade Verification
Enrollment verifications 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.

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 Vice President of College and Administrative Services (student financial responsibility), Vice President of Student Services (financial aid, counseling
Student records will be reviewed annually, and those which are no longer required to be maintained will be destroyed in accordance with Title 5 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:

- 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.
- 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.
- 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.
- 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.
- 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. 26.

**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. 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.
GETTING STARTED AT MJC

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
- inaccurate;
- an unsubstantiated personal conclusion or interference;
- a conclusion or interference outside of the observer’s area of competence; or
- 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

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
STUDENT RIGHTS AND RESPONSIBILITIES

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 according to Title 5 regulations). Issues that relate to missed deadlines and graduation requirements are not petitionable. Petitions are reviewed by the MJC Petitions Committee, and in some instances, input is provided by departments, 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 course of the challenge) 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. ◆
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, 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, lewd 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 ACTIONS 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:

- **Informal Reprimand**: An oral admonition or warning to cease and desist from conduct that has been determined to violate the standards of conduct.
- **Formal Reprimand**: Written admonition or warning to cease and desist from conduct that has been determined to violate the standards of conduct.
- **Removal from Class**: The involuntary removal of a student from class by an instructor for a maximum period of two consecutive class sessions.
- **Removal from Facility**: 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.
- **Loss of Privileges**: Disciplinary action involving the loss of certain student privileges, such as eligibility to participate in extracurricular activities, for a stated period of time.
- **Disciplinary Probation**: 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.
- **Disciplinary Suspension**: The involuntary removal of a student for good cause from one or more classes from the college by action of the Vice President of Student Services for a limited period of time, as follows:
  - **Short-Term Suspension**: Removal from one or more classes for a period of up to 10 consecutive days by instruction.
  - **Long-Term Suspension**: 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.
- **Immediate Interim Suspension**: The Vice President of Student Services 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.
- **Expulsion**: A student may be expelled for good cause where other means of correction have failed to bring about proper conduct or where 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.

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 »

1. Students shall be given notice of the violation and,

2. Students shall be given an opportunity to respond to the allegations.

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 (p. 43). 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, gender, 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 98220.)

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 preference 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.

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, or physical or mental disability, or lack of English language skills. This policy is in accordance with Title 51 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, gender, sexual orientation, color, physical or mental disability, or lack of English language skills should contact the Vice President of 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 2011-2012 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 add, 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, el 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 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 2011-2012 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

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STUDENT RIGHTS AND RESPONSIBILITIES

Sexual Harassment at MJC

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

SEXUAL HARASSMENT INCLUDES:

- submission to conduct which is explicitly or implicitly made a term or a condition of an individual's employment, academic status, or progress;
- 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 work or educational environment; and
- 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.

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, gender, 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) 575-6702 (voice) or (209) 575-6863 (TTY). ☑
Student Life at Modesto Junior College

Activities, services, and programs to help you make the most of your MJC experience

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
Student Services and Programs

**Student Services Division**

**Don Low, Ed.D**  
Interim Vice President Student Services  
Morris Memorial Building Room 212, Phone: (209) 575-6060, Fax: (209) 575-6843

**Support Staff**

Geri Vargas, Executive Secretary

**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.

**Counseling and Guidance**

East Campus, Morris Memorial Building, Room 103  
West Campus, Limited appointments available. Call for details.  
Phone: (209) 575-6080, FAX: (209) 575-6720

The counseling and guidance program assists students with decisions which affect their academic and 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 within twenty-four hours. Found property can be turned into the Business Services Office on East Campus, the Campus Safety office on West Campus or to any member of the Campus Safety staff. Property turned in on East campus will be moved to West for storage after one week. Found property may be claimed at the Campus Safety office on West Campus only.

**Emergency Locating Service**

East Campus, Student Center, Student Development & Campus Life Office  
Phone: (209) 575-6700

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 person in his/her class. To be a part of the Emergency Locating Service, a student must complete an Emergency Locator Form which indicates the location and time of each class. Forms must be updated each semester. Emergency Locating Service Forms are available in the Student Development and Campus Life Office, located inside the East Campus Student Center, next to the Cafeteria. Without an Emergency Locating Service form on file, a message cannot be delivered to a student.
Career Development & Transfer Center

East Campus: Library Annex, 103
Phone: (209) 575-6239

The Career Development and Transfer Center houses Career Center, Job Placement and Transfer Center services under one roof.

CAREER CENTER

Provides students and prospective students with valuable career exploration tools and resources such as career workshops, software programs, internet websites, and books. Referrals for career testing and assessments, which may assist students in career selection, will be made based on student needs. Visit the website at www.mjc.edu/career.

JOB PLACEMENT

Job Placement helps MJC students and alumni find employment opportunities by connecting them with local employers who are looking to hire. Center serves as a liaison with employers throughout the area who are looking to hire MJC students and graduates. Job Placement activities consist of the following:

- Leads to full-time & part-time opportunities
- On-Campus recruitments by employers
- Job Fairs (Fall and Spring semesters)
- Internship Opportunities
- Labor Market Information
- Resume & Interviewing Tips
- Job Hunting Resources
- E-mail Job Alerts

Visit the website at www.mjc.edu/jobsforstudents or call (209) 575-6239.

TRANSFER CENTER

Center’s function is to assist MJC students in making a smooth transition to four-year universities. Transfer Center supports student planning to transfer by providing information and assistance crucial in the development of successful transfer pathways. Some of the Transfer activities consist of the following:

- TAG’s Transfer Admission Guarantee Contracts to designated four-year universities
- One on one appointment with counselors and university representatives
- Transfer workshops such as “Pathways to Transfer Success”, “Completing a Transfer Admission Guarantee,” “Writing a Personal Statement”
- Free Campus Tours of four-year universities
- Assistance with electronic applications and fee waivers
- Assistance with admission procedures
- Assistance with admission websites and articulation
- Annual Transfer/Day College Night with over 60 four-year universities represented

Visit the website at www.mjc.edu/transfer.

CalWORKs Program

West Campus: Yosemite Hall, Room 148, Phone: (209) 575-7770
MJC CalWORKs Counselors: (209) 575-7770, (209) 575-7768
Website: http://www.mjc.edu/current/resources/support/CalWORKs/index.html.

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.

CARE Program

East Campus, Morris Memorial Building, Room 112, Phone: (209) 575-6692
West Campus: Yosemite Hall Building, Room 152
Hours: Contact East Campus EOP&S Office at (209) 575-6251

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 Cal WORKS resources, as well as informational workshops, an annual Winter holiday season and Easter cultural events. For more information call the CARE Program services representative at (209) 575-6692.

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.

Scholarship Program

West Campus: Yosemite Hall Building, Room 147, Phone: (209) 575-7715

The Modesto Junior College Scholarship Program offers over 150 scholarships annually to eligible students who enroll full time during the Fall semester. Awards range from $200 to $2,000 per academic year. Students who will be new incoming or continuing can receive up to a maximum of $2500 and transfer students up to $3500. Scholarships are funded by the MJC Foundation, private donors, community agencies and businesses whose focus is to encourage and support the educational goals of the students we serve.

To receive consideration for scholarships, students must have completed 12 units with a cumulative grade point average of 2.5 or higher and be actively enrolled as a full-time student the following Fall semester. (Students accepted and enrolled in the MJC Nursing Program will be considered full time for scholarship purposes only.) High school seniors are exempt from the 12-unit completion, but must submit their high school transcript. Scholarship selections are made based upon proven academic performance and strength of major, motivation, potential for success and may include the following: major, residency, organizational affiliation and active community service.

The MJC Scholarship Application and Recommendation Form will be available on the MJC Financial Aid link on-line at www.mjc.edu the first Monday in October and will be due the last Friday of finals week during the Fall Semester. High school seniors who will be new-incoming full-time freshmen during Fall semester will have until the second Friday in March to submit their applications.

For questions or more information regarding the MJC Scholarship Program, contact Melissa Clark in the Scholarship Office at (209) 575-7715 or email clarkme@mjc.edu.
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, General Child Care, and State Preschool. Priority is given to MIC 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. Call the Wawona Child Development Center Office for more information.

**Me-Wuk Child Development Lab Preschool**
West Campus, John Muir, Office 157, Phone: (209) 575-6343
Enrollment for 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 Child Development instructors.

**Disability Services (DSPS)**
East Campus, Journalism Building, Room 160
Phone: (209) 575-6225, TTY: (209) 575-6863, Fax: (209) 575-6852

**DSPS High Tech Center:**
West Campus: Yosemite Hall, Room 145A, Phone: (209) 575-7733

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.

**Extended Opportunity Programs and Services (EOP&S)**
East Campus: Morris Memorial Building, Room 108, Phone: (209) 575-6037
West Campus, Yosemite Hall, Room 114, Phone: (209) 575-6360

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. Services are offered primarily on a drop-in basis.

Registered nurses are available to provide first aid, confidential counseling on communicable diseases, family planning, nutrition, exercise and weight management, and all aspects of personal health. Health Services provides vision and hearing screening, blood pressure monitoring, tuberculosis screening, pregnancy tests, and immunizations. Referrals can be made to local community providers as needed including personal and mental health counseling. Non-prescription medications are available for minor aches, pains, colds, sore throats, allergies, and upset stomachs, as are pamphlets and brochures.

In case of illness, your Health Services nurse can provide care in the form of first aid and/or referral service including an appointment to see a physician on campus at no cost. A cot is available for short rest periods 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 for information about student insurance coverage.

**ADDITIONAL CONFIDENTIAL SERVICES INCLUDE:**

**DOCTOR CLINIC:** A doctor is scheduled to be on-campus weekly. Appointments are scheduled after receiving a referral from the nurse.

**STANISLAUS COUNTY PUBLIC HEALTH AND FAMILY PACT:** Provides family planning, and some STD screening once a week.

**MENTAL HEALTH SERVICES:** Referral for 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 at the above locations. Student ID with current semester sticker is required for all services. Call for hours or log on to the Web site at www.mjc.edu/healthservices.

International Students
International Student Program
Barbara St. Urbain, Coordinator/Counselor
Counseling Services Office
East Campus, Morris Building, 103 (in Counseling Services), Phone: (209) 575-6012
Email: sturbainb@mjc.edu

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. Services such as admissions assistance, 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 international students upon arrival to MJC. Students are encouraged to visit the International Counselor, available in the Counseling Center.

Modesto Junior College welcomes qualified international (non-immigrant) students to its academic, vocational and technical programs. The college 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 go to www.mjc.edu/international or contact the coordinator of the program, Counseling Center, (209) 575-6080 or sturbainb@mjc.edu.

TRIO Programs
Francisco Banuelos, Director of Pre-College Programs
East Campus: Morris Memorial Building, Room 207
For TRIO/Educational Talent Search: (209) 575-6743
For TRIO/Upward Bound)(209) 575-6743

TRIO/EDUCATIONAL TALENT SEARCH
TRIO/Educational Talent Search (ETS), funded by the U.S. Dept of Education, is geared to assist students from disadvantage backgrounds and prepare them to succeed in higher education. The MJC TRIO/ETS Program serves over 600 students from Hanshaw Middle School, Mark Twain Junior High, Elliot Alternative Education Center, Modesto and Downey High Schools. A variety of academic, career, financial/scholarship, college admissions, and cultural activities are available to program participants. For more information, please contact the TRIO/ETS office at (209) 575-6743 or visit us on the MJC East Campus in the Morris Building Room 207.

TRIO/UPWARD BOUND
TRIO/Upward Bound (UB), funded by the U.S. Dept of Education, assists low income and/or first generation high school students by providing them with the opportunities to succeed in their precollege performance and in their higher education pursuits. Upward Bound offers a comprehensive program of intervention activities designed to generate the skills and motivation necessary for success in high school and in college. The program serves 125 students from Patterson, Riverbank, Davis, Johansen and Ceres High Schools. Upward Bound 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
East Campus, Library Basement, Room 40
Phone: (209) 575-6189, Fax: (209) 575-6886

The TRIO 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. The 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 visits; information about financial aid and scholarships; career advising; and workshops to develop and enhance academic and personal skills.
Student Development & Campus Life

Wendy Byrd, Director
West Campus: Mary Stuart Rogers Student Learning Center, Phone: (209) 575-7991
East Campus: Student Center, Phone: (209) 575-6700

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 5:00PM, 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 (EAST) or (209) 575-7991 (WEST) for more information.

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 should 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

West Campus: Yosemite Hall, Room 147
Phone: (209) 575-7728
www.mjc.edu/assessment

The Testing Center administers tests for placement 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 go to www.mjc.edu/assessment.

Veterans’ Services

East Campus: Morris Memorial Building, Room 104
Phone: (209) 575-6017

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 veterans’ 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.

Business Services Offices

East Campus, Student Center
West Campus, Yosemite Hall A133

The Business Services Offices are located on the East Campus, in the Student Center and on the West Campus, in Yosemite Hall. The Business Services Office provides students with fee collections, distribution of refund and financial aid checks.

Food Services

East Campus Cafeteria, Student Center

Vending Machines Available In The Student Center.
East Campus Pirates Galley/Starbucks, Student Center
West Campus Cafeteria: Mary Stuart Rogers Learning Center

Vending Machines Available.
West Campus Convenience Store,
Mary Stuart Rogers Student Learning Center
Clubs and Activities

Student ID Card and Benefits Sticker

All enrolled students are eligible for a free Student ID card. Stop by the Student Development and Campus Life with your schedule (indicating a $0 balance) and an additional photo ID, such as a driver’s license or high school student ID card. Unless you decline, you will be charged a $5 benefit fee. This fee entitles you to discounts at campus events and local businesses. It also includes one free Go Print card (while supplies last). The card has a $2 value and can be used in MJC computer labs. For more details call (209) 575-6700.

TO OBTAIN AN MJC ID CARD

Bring your current class schedule—indicating a $0 balance and an additional photo ID, such as a driver’s license or high school student ID card to:

EAST CAMPUS, Student Center
Monday - Thursday, 8:00am – 7:00pm, Friday - 8:00am – 5:00pm

WEST CAMPUS, Mary Stuart Rogers Student Learning Center
Monday - Thursday, 8:00am – 9:00pm, Friday - 8:00am – 5:00pm

WHAT ARE THE BENEFITS?

Proceeds support student programs and activities
- Free $2.00 Go-Print card (while supplies last)
- Free faxes, phone calls, scantrons and copies (limitations apply)
- Discounts from local businesses
- Discounts at campus events such as, football games, plays, and BBQ’s

Student Leadership

The Student Development and Campus Life office 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)

The Associated Students of Modesto Junior College (ASMJC) is the official representative student body of Modesto Junior College. 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 most major decisions made at Modesto Junior College affect students, their input has become increasingly relevant. ASMJC is recognized as the “student voice” by faculty and administration.

ASMJC is also responsible for planning, budgeting, and coordinating campus activities for student enjoyment outside of the classroom. Activities include free concerts, field trips, cultural events, and leadership conferences. ASMJC introduces students to a diverse calendar of events for their enjoyment and leadership development.

Clubs & Organizations

The Student Development and Campus Life Office is responsible for advising and coordinating activities for student clubs and organizations. Students are encouraged to broaden their horizons by participating in club activities. 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.

ASMJC CLUBS

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

EAST CAMPUS: STUDENT CENTER

The East Campus Student Center is the focal point of campus life. It includes: The Welcome Center, Admissions Office, Business Office, Bookstore, Cafeteria, Student Lounge, and Student Development and Campus Life Office. For your convenience and leisure there is an ATM machine, coin exchange machine, vending machines, and video games. Whether you are sharing a meal, attending a concert, volunteering for ASMJC, or socializing with friends—the Student Center provides numerous opportunities for social engagement and academic development.

WEST CAMPUS: MARY STUART ROGERS STUDENT LEARNING CENTER

The Mary Stuart Rogers Student Learning Center includes: An ASMJC office, cafeteria, convenience store, TV lounge, game room, computer lab and multipurpose rooms. You will also find an ATM machine, coin exchange machine, vending machines, and video games.

STUDENT REPRESENTATION FEE

The Student Representation Fee was amended in the California Education Code by Assembly Bill 2576 in late 1988. This fee is an optional $1 cost
that can be implemented to serve any California Community College campus through a student body election. In April of 1993, ASMJC held a general student body election with the Student Representation Fee on the Ballot. The fee passed and 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 with all other fees at the time of registration, and is deposited in a separate fiduciary fund. Funds collected are allocated to ASMJC and used to represent student concerns in government at local, state, and federal levels. A student may decline the Student Representation Fee for religious, political, financial, or moral reasons. The decline must be stated in writing.

**Honor Societies**

**ΑΓΣ - ALPHAGAMMASIGMA - 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/agls.

**ΦΘΚ  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**

The MJC East Campus Art Gallery hosts several original shows each year. Artwork from emerging and established artists, both local and international, are installed in the purpose built space. A wide range of art styles and media are represented including paintings, sculptures and mixed media pieces. MJC students and faculty exhibit their works annually. Students enrolled in the gallery operations class assist in the management and installation of the shows. Please visit mjc.edu/art for more information.

**Music Performance**

The college’s music department has deep and long standing roots in the surrounding community. Instrumental performance opportunities include Guitar Orchestra, Community Orchestra, Symphonic Band, Community Concert Band and Jazz Bands plus brass, percussion, woodwind, string ensembles and electronic music. Vocal performance opportunities include Masterworks Chorus, college choirs and musical theatre productions. Elementary, intermediate and advanced piano, organ, guitar, instrumental, and voice classes are available to music students. Students who desire to transfer as music majors to a four-year institution are strongly encouraged to contact a faculty advisor early in their first semester of study at the college. Please visit mjc.edu/arts for current concert performance descriptions and schedules.

**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 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. 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, and 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. Many
former Log writers and editors are found today in the ranks of local media professionals. Participation is open to student photographers enrolled in Journalism 146 or writers enrolled in Journalism 120 who have passed Journalism 100. Visit mjc.edu/arts for more information.

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

Arts Competition: The Celebration of the Humanities
For over thirty years the Arts, Humanities and Communications Division and the Literature and Language Arts Division have sponsored an annual campus-wide student arts competition in eight major categories: Visual Arts, Photography, Theatre, Writing, Speech, Dance, Music, Film and Video. Awards are handed out at the popular performance ceremony held each April in the Performing and Media Arts Center Main Auditorium. A major student art exhibit is a highlight of this event. MJC students registered in the current summer, fall or spring term are eligible to enter in this exciting contest. Visit celebration.events.mjc.edu 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. Visit mjc.edu/speech for more information about how to participate as a novice or experienced speaker.

Theatre and Dance Productions
MJC Theatre productions have been popular community events since the early years of the college. Each season the department produces four to six productions including classic dramas, Shakespearean plays, comedies and Broadway style musicals. Shows are produced in new state-of-the-art facilities including a 796 seat proscenium theatre, a 74 seat Little Theatre and a 100 seat Black Box Theatre. Students participate in all aspects of the theatre arts with academic credit available in acting, lighting, costume and scenery production techniques. Visit mjc.edu/theatre for information about auditions and performances.

The Dance department produces three concerts each year and celebrates modern, jazz, ballet and hip-hop styles. Dance students are encouraged to learn to choreograph their own works using student and community dancers to communicate or express a vast range of artistic impressions. Students travel to the annual American College Dance Festival to take classes and perform with movement professionals from all over the world. Visit mjc.edu/dance for more information.

TV - Film Productions
Television and film students produce a variety of work which may air on local cable television and is ready for submission to film festival competitions. Students 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 production company or with local-regional television stations and production companies. The MJC television and film facilities include a new digital three camera television studio and control room, along with cameras and editing equipment to produce professional caliber projects. Visit mjc.edu/arts for more information.

Pirates’ Radio
MJC students operate an on-line radio station, MJC Pirates’ Radio as part of a professionally oriented program. Each student programs his or 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 state-of-the-art digital recording studio. Many former student DJ’s have gone on to professional radio work on the West Coast from Seattle to Los Angeles. Visit mjc.edu/arts for more information.

The Mary Stuart Rogers Student Learning Center (left) located on MJC’s West Campus features a multipurpose room, 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.
Library and Distance Education

Library and Information Technology
Dean of Library and Information Technology
East Campus, MJC Library  (209) 575-6235

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

Support Staff
Kimberly Schrader, Admin. Secretary
Kathy Haskin, Telecourse Office
Cheryl Chavez, Blackboard

Library Support Staff
Sandy Gallardo
Mary Beth Gish
Dodie Larson
Prasad Mathai
Linda Occhipinti
Charlene Olivera
Yia Vang
Manuel Vargas
Isabelle Lacazotte

About the Library
Library and information services are located on both the East and West campuses and can also be accessed through the MJC Library Web site. The library staff welcomes questions and is happy to help users access and use the many library resources available to them.

The library’s collection includes books, magazines, newspapers, journals, DVDs, 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 services, class instruction on library research methods, computer labs, copy machines, study space for individuals and groups, and course textbook reserves. Off-campus library services include access to numerous research sources including article databases, subject-specific research guides, and eBooks. In addition, users can get help from a reference librarian via email or telephone. To access library resources off campus, users simply need to log in using their student ID number and six-digit birth date.

All students, faculty, and staff, as well as college retirees, have full library privileges. MJC Alumni and Library Friends can pay the $20 annual membership to the Friends of the MJC Library; this grants them borrowing privileges.

LIBRARY INSTRUCTION
The library 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, attend drop-in research workshops that are offered each semester, or enroll in formal library research courses emphasizing skills that can be used in many research and information applications.

MJC Telecourses (Televised 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 can be found in MJC’s online class schedule each semester. Many telecourse DVDs and videos may be checked out for the entire semester at the MJC Library Reserve Area, though some courses require students to purchase the DVDs/videos. 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 MJC’s online class schedule.

MJC 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 (for example, Internet Explorer or Firefox) and 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 ready access to the Internet. 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: www.mjc.edu/online.

Academic Computer Labs
There are three open computer labs to support student computing; all three labs have general programs for word processing, spread-sheets, 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 plus one Macintosh. Printing requires a GoPrint card. Student aides are available to assist and answer questions.

WEST CAMPUS LIBRARY OPEN COMPUTER LAB: Located in the West Campus Library, Yosemite 235, this lab has Windows computers equipped with Microsoft Office Suite, 2007 plus one Macintosh. Printing requires a GoPrint card. Student aides are available to assist and answer questions.

STAR LAB: This lab is located in Pirates’ Village Room 108. The lab has 30 computers, and laser printers are also available. ✓
Support for Learning

Bookstore

**East Campus**, Student Center, Phone: (209) 575-6840 FAX: (209) 575-6851
Email: bookstore.yosemite.cc.ca.us

**West Campus**, John Muir, 154, Phone: (209) 575-6966

The Pirates Bookstore East Campus carries textbooks for classes that are held on the East Campus as well as school and office supplies, general books, MJC collegiate fashions, gifts, greeting cards, newspapers, candy, snacks, jewelry and electronics. We offer computer software at educational prices. The Artists’ Cove is in the rear section of the East Campus store and carries a wide variety of artist materials and supplies that are required by MJC instructors. The West Campus Pirates Bookstore carries textbooks for the classes that are conducted on the West Campus as well as school and office supplies, candy, snacks, MJC collegiate fashions, gifts, greeting cards, newspapers, jewelry and electronics. MJC catalogs and class schedules may be obtained at both bookstores and can be mailed prepaid on our website. Bookstore hours are extended during the beginning of each semester. Visit us at our website: bookstore.yosemite.cc.ca.us to order your text online, find out about buyback and see the latest store hours.

Book Loan Program (CTE)

**West Campus**, Yosemite Hall, Room 118, Phone: (209) 575-6979

The CTE Book Loan Program is available to assist eligible students with the purchase of textbooks each semester. 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 directly.

Tutoring Center

**East Campus**, Library Basement, Room 10, Phone: (209) 575-6839

**West Campus**, Yosemite Hall, Room 118, Phone: (209) 575-7731

The Tutoring Center is a free service for MJC students who need assistance with academic work. 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 assistance from the Tutoring Center often improve their overall academic performance by learning to study more efficiently.

Learning Communities

Learning communities are 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. To find the learning communities that are being offered, look for the learning community pages in the **MJC Schedule of Classes**.

Math Drop-in Center

**East Campus**, Pirates’ Village, Room 117, Phone: (209) 575-6662

**West Campus**, Sierra Hall, Room 214 (in the Center for Learning Assistance) Phone: (209) 575-7845

At the Math Drop-In Center, math assistants are available to help you 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.

College Facilities/Events/Mail Room

**East Campus**, Morris Building, Mailroom Phone: (209) 575-6020

The college is a center for community functions of various kinds. College facilities are available for rent by recognized non-profit community groups when such use does not interfere with the regular educational program.

Writing Center

**East Campus**, Pirates’ Village, Room 117, Phone: (209) 575-6682

**West Campus**, Sierra Hall, Room 214 Phone: (209) 575-7847

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.

Supplemental Instruction (SI)

**East Campus**, Tutoring Center, Library Basement Room 10, Phone: (209) 575-6839

Supplemental Instruction (SI) is a series of weekly review sessions for students taking historically challenging courses. SI is offered to any student who wants to improve their understanding of course material and earn higher grades. Select courses that offer SI sessions are courses in math and science. SI is available to students who participate in the First Year Experience Program. •
Learning English and cultivating her educational opportunities at MJC...

Mei's English seems very good for someone who was raised speaking Hakka, a dialect of Cantonese, and Mandarin, which is the national language of China. She grew up in a small village in Hui Zhou City, in Southern China about two hours north of Hong Kong by train, and was part of a large family by Chinese standards, with two brothers and two sisters. Mei met her American husband, Patrick, while he was teaching English for two years at the university Mei was attending, and their romance blossomed. After returning to the U.S. to finish his degree, Patrick brought Mei to Modesto in 2005 and they married shortly after she arrived.

Mei had some English-speaking friends in China and had wanted to become a translator for business, so she could speak some English. However, her skills in writing and reading English were limited, and she began taking basic English classes at Modesto Junior College. “I wanted to work in an office but couldn’t get a job until I improved my English.” Her language skills quickly expanded, although she claims that English remains her greatest educational obstacle. Mei is now majoring in Accounting at MJC and only needs to complete seven more classes to achieve her Associate’s degree. She plans to transfer to CSUS in the fall of 2011, where she hopes to double-major in Accounting and Finance. Her career goal is to work for a bank or accounting firm. “I figured out that I liked accounting by being responsible for my own budget and checking account.”

Mei reports that statistics and financial concepts are much easier for her than grammar, and some of her favorite classes include John Carter’s Economics course, and Financial Accounting and Business Law with Patricia Walls and Jim McGarry. “I like the organization and analyzing of financial data.” She also discovered that Economic History of the U.S. is very interesting when she took this course with Cecelia Hudelson-Putnam. However, the professor she most admires and would like to emulate is Nancy Sills, from whom she took Managerial Accounting. “She is very quick, organized, determined, and professional, yet very friendly. I want to be like her.”

Mei is also greatly inspired by her church family members who helped the young couple by giving Mei a loving place to stay while Patrick was gone for military training and who also rented them a cottage when he returned. She also reveres the commitment of a missionary family she met in China. “These people are so generous and loving, and they provide living examples of their faith.”

While attending college, this hardworking and disciplined young woman has juggled a variety of jobs, including working for a motor parts distributor, teaching Chinese, tutoring math and being a nanny. Mei has now reduced her job hours to focus on college and is currently only working part time in the MJC Community Education Office. She and her husband were also able to purchase a home in 2008 and Mei enjoyed cultivating her first garden last summer, harvesting tomatoes and squash, and discovering a passion for growing things. “I love outdoor activities, and now that I’m working fewer hours, besides having more time for school, I also have more time for gardening, bicycle riding, swimming and hiking.”

Another activity in which she delights is singing modern praise hymns as part of her church’s worship team. One might say that in many ways Mei’s life itself “sings,” because of her enjoyment and gratitude for the opportunities she has been given are so evident.

Mei Xie-McGar

“Education is totally different in China. There you select a major early and the classes and books are all selected for you as part of your major. So the need to see an educational counselor and pick my own classes at MJC surprised me. But now that I’m used to it, I love the flexibility of designing my own education.”
Planning Your Education

Counseling Services
Dean Tsuruda (Interim)
Dean of Counseling and Student Services
MJC East Campus, Room 103
(209) 575-6080
Division website: www.mjc.edu/prospective/getting_started/advising/index.html
Support Staff: Donna Yamal, Administrative Secretary; Elaine Thornton, Administrative Assistant

Earn 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 page 62). 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.

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 or GE. 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.
- 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.

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.

Educational Plans
An Educational Plan (p. 63) 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 your 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.

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

Achieving Your Goals
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.

Planning Your Education

Earn 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 page 62). 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.

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 or GE. 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.
- 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.

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.

Educational Plans
An Educational Plan (p. 63) 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 your 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.

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

Achieving Your Goals
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.
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. 70, or IGETC (Intersegmental General Education Transfer Curriculum) on p. 72. 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.
# 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 can be awarded to students with catalog rights to the 2011-2012 MJC Catalog.

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<tr>
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**LEGEND**

- **AS**: Associate of Science Degree
- **AA**: Associate of Arts Degree
- **TAA/TAS**: Transfer Preparation Associate Degree
- **GSE**: General Studies Emphasis (Non-transfer)
- **UPE**: University Preparation Emphasis (for Transfer)
- **C**: Certificate of Achievement
- **SR**: Skills Recognition
## Modesto Junior College Educational Plan

### 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>GUIDANCE</th>
<th>ACTIVITIES</th>
</tr>
</thead>
</table>

### Assessment Tests

<table>
<thead>
<tr>
<th>Taken</th>
<th>Need</th>
<th>Placement</th>
</tr>
</thead>
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</tbody>
</table>

### Basic Skills Needed

- [ ] READING
- [ ] ENGLISH
- [ ] MATH
- [ ] ESL
- [ ] STUDY SKILLS

### Competency Requirements

- [ ] READING
- [ ] ENGLISH
- [ ] MATH

### 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.1] 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] English 101
  - [A.3]
  - Area B (9)
  - [B.1]
  - [B.2]
  - B.3 Lab (w. B.1 or B.2)
  - [B.4]
  - Area C (9)
  - [C.1]
  - [C.2]
  - C.1 or 2
  - Area D (9 units, from areas 0-9)
  - [D.1]
  - [D.2]
  - [D.3]
  - Area E (3)
  - [E.1]
  - U.S. History, Const. & Amer. Ideals 6 units req.

### A.A. IGETC UC or CSU

#### General Ed.

- [ ] Met
- [ ] 1. English Comp. (6-9)
  - [A.1] English 101
  - [B.1]
  - [C.1 (CSU Only)]
  - 2. Math/Quant. Reasoning (3)
  - [D.1]
  - [D.2]
  - [D.3]
  - 3. Arts & Humanities (9)
    - [a.]
    - [b.]
    - [a. or b.]
  - 4. Social & Behav. Sci. (9)
  - [D.4]
  - [D.5]
  - 5. Physical/Biological Sci. (7)
    - [a.]
    - [b.]
    - Foreign Language (UC only)
    - [D.6]
  - U.S. History, Const. & Amer. Ideals (CSU Only) 6 units req.

#### Area of Emphasis

- [ ] 18 units required for A.A.

#### Transfer Major prep

- Refer to www.assist.org

### Tentative Program

<table>
<thead>
<tr>
<th>Term</th>
<th>Units</th>
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</table>

### Notes

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6/08
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 65, 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.

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.

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 75, 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 Building Room 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. The certification is recognized by the California State University system and the University of California system.

Many MJC students apply to transfer to UC and CSU systems and are able to start classes at junior status.
University Preparation PATHWAY

Earn an associate's degree while preparing for a bachelor's degree 2011-2012

Successfully complete the following steps to earn an associate’s degree from MJC while simultaneously satisfying lower-division general education requirements for bachelor's degree at many universities throughout California. While satisfactory completion of these requirements does not guarantee admission to a specific college or university, it will demonstrate that you have satisfied many “lower-division” requirements in preparation for upper-division study. Enroll in a Guidance class or meet with a counselor so that you complete each step accurately and efficiently. To learn more about the University Preparation Pathway, see page 64.

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* (page 68.)

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 Building Room 107. Successful completion will also demonstrate that you have met or exceeded state-required competencies for reading, writing, and mathematics.

   Do you plan to transfer to California State University? Complete one of the following two patterns:
   - CSU-GE Transfer Pattern (p. 70): To prepare for the Liberal Studies/Teacher Preparation program at CSU Stanislaus see page 177 for specific CSU-GE course requirements.
   - IGETC Transfer Pattern (p. 72): Follow CSU requirements.

   Do you plan to transfer to the University of California? Complete one of the following:
   - IGETC Transfer Pattern (p. 72): Follow UC requirements.
   - Individual breadth pattern for the UC campus of your choice as it appears on www.assist.org.

   Do you plan to transfer to a private or out-of-state college or university? If not, you will need to complete the Career and Technical Education Pathway (see page 67) to earn an Associate’s degree from MJC.

   Work with a counselor to choose and complete one pattern (CSU-GE or IGETC) that best fulfills lower-division requirements for the targeted school.

Do you plan to earn a bachelors degree in a "high unit” major or one that requires extensive lower-division preparation?

   Work with a counselor to determine whether the University Preparation Pathway is right for you. If not, you will need to complete the Career and Technical Education Pathway (see page 67)

Select and complete an Associate’s Degree major or a University Preparation 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 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 AS major in Physical Science, will receive a degree that reads: ADegree: 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 emphasis options, see page 65. 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 in 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.

(Rev 01/15/08)
PLANNING YOUR EDUCATION

ABOUT THE Career Technical Education PATHWAY

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 and certificates of achievement 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 awards offered, see “EDUCATIONAL AWARDS OFFERED AT MJC” on page 62.

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 62 for a list of career-oriented associate’s degrees and certificates of achievement
Prepare for employment with an associate's degree or certificate of achievement.

Successfully 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 66.

**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 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.
   - Score of 5 on IB Exam: Mathematics HL

4. **Complete the MJC Guidance and Activities Requirements** as part of the 60 units required for associated degree. See page 68.
5. **Fulfill the general education requirement** as part of the 60 units required for associated degree by completing the MJC-GE Pattern (see page 69) with a GPA of 2.0 or higher.
6. **Complete a MAJOR or General Studies EMPHASIS** from those listed in the catalog in which you plan to earn your degree:
   - **Associate of Arts Degree (AA):**
     Complete requirements for any AA Major listed in the MJC Catalog. Your AA degree will be in that major.
   - **Associate of Science Degree (AS):**
     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.
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 requirements for graduation, various educational and career options, resources at MJC, as well as create an Educational Plan to ensure that 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.

I. Guidance Requirement:
Complete one course during first semester.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>Intro to Ag Educ &amp; Careers (1)</td>
<td></td>
</tr>
<tr>
<td>AGD 115</td>
<td>Intro to Ag Edu. (1,2)</td>
<td></td>
</tr>
<tr>
<td>AUBT 115</td>
<td>Intro Tech Industries (1)</td>
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</tr>
<tr>
<td>AUTC 115</td>
<td>Intro Tech Industries (1)</td>
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</table>

II. Activities Requirement:
Complete two (2) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 100A/B</td>
<td>Leadership in Agriculture (1-2)</td>
<td></td>
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<tr>
<td>ART 102</td>
<td>Intro to Computer Graphics (3)</td>
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<tr>
<td>ART 108</td>
<td>Ceramics 1 (3)</td>
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<tr>
<td>ART 109</td>
<td>Ceramics 2 (3)</td>
<td></td>
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<tr>
<td>ART 110</td>
<td>Ceramics 3 (3)</td>
<td></td>
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<tr>
<td>ART 120</td>
<td>Basic Drawing 1 (1)</td>
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<tr>
<td>ART 121</td>
<td>Basic Drawing 2 (3)</td>
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<tr>
<td>ART 123</td>
<td>Figure Drawing (3)</td>
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<tr>
<td>ART 125</td>
<td>Color &amp; Design (2)</td>
<td></td>
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<tr>
<td>ART 127</td>
<td>Atem Lopez Method (3) (Su07)</td>
<td></td>
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<tr>
<td>ART 140</td>
<td>Sculpture 1 (3)</td>
<td></td>
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<tr>
<td>ART 141</td>
<td>Sculpture 2 (3)</td>
<td></td>
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<tr>
<td>ART 142</td>
<td>Sculpture 3 (3)</td>
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<tr>
<td>ART 144</td>
<td>Watercolor Painting 1 (3)</td>
<td></td>
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<tr>
<td>ART 145</td>
<td>Watercolor Painting 2 (3)</td>
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<tr>
<td>ART 146</td>
<td>Mixed Media Painting (3)(F05)</td>
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<tr>
<td>ART 147</td>
<td>Painting I (1-Acrylic) (3)</td>
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<tr>
<td>ART 148</td>
<td>Painting II (1-Oil)</td>
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<tr>
<td>ART 149</td>
<td>Painting III (1-Oil)</td>
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<tr>
<td>ART 150</td>
<td>Gallery Operation &amp; Mgmt (3)</td>
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<tr>
<td>ART 157</td>
<td>Digital Photography (3)</td>
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<tr>
<td>ART 170</td>
<td>Basic Photography (3)</td>
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<tr>
<td>ART 171</td>
<td>Basic Photography I (1)</td>
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<td>ART 172</td>
<td>Basic Photography II (1)</td>
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<td>ART 179</td>
<td>Photography I (3)</td>
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<td>ART 180</td>
<td>Photography II (3)</td>
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<tr>
<td>ART 181</td>
<td>Basic Photography III (3)</td>
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<tr>
<td>ART 182</td>
<td>Basic Photography IV (3)</td>
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<tr>
<td>ART 185</td>
<td>Photography Lab Tech (L,F,R,F01)</td>
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<tr>
<td>ART 191</td>
<td>Photo Lab Technology II (F02)</td>
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<tr>
<td>CGR 201</td>
<td>Digital Graphics Fund (F03)</td>
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<tr>
<td>CGR 202</td>
<td>Intro to Computer Graphics (3)</td>
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<tr>
<td>CGR 203</td>
<td>Photo Techniques Fund (3)</td>
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<tr>
<td>CGR 204</td>
<td>Dynamic Visual Fund (3)</td>
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<tr>
<td>CGR 207</td>
<td>Digital Imaging (1)</td>
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<tr>
<td>CGR 208</td>
<td>Digital Imaging II (1)</td>
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<tr>
<td>CGR 209</td>
<td>Digital Imaging III (1)</td>
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</table>

Guidance Requirement:

Complete two (2) units.

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<tr>
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<td>CGP 202</td>
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Students completing this course prior to term (F, S, Spring, SU, Summer) and year indicated will not be allowed to fulfill this requirement with this course.

II. Activities Requirement:
Complete two (2) units.

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<th>Course Code</th>
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<td>Basic Photography I (1)</td>
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</tr>
<tr>
<td>ART 172</td>
<td>Basic Photography II (1)</td>
<td></td>
</tr>
<tr>
<td>ART 179</td>
<td>Photography I (3)</td>
<td></td>
</tr>
<tr>
<td>ART 180</td>
<td>Photography II (3)</td>
<td></td>
</tr>
<tr>
<td>ART 181</td>
<td>Basic Photography III (3)</td>
<td></td>
</tr>
<tr>
<td>ART 182</td>
<td>Basic Photography IV (3)</td>
<td></td>
</tr>
<tr>
<td>ART 185</td>
<td>Photography Lab Tech (L,F,R,F01)</td>
<td></td>
</tr>
<tr>
<td>ART 191</td>
<td>Photo Lab Technology II (F02)</td>
<td></td>
</tr>
<tr>
<td>CGR 201</td>
<td>Digital Graphics Fund (F03)</td>
<td></td>
</tr>
<tr>
<td>CGR 202</td>
<td>Intro to Computer Graphics (3)</td>
<td></td>
</tr>
</tbody>
</table>

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.

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.

*Approved by the MJC Academic Senate 02/18/2010. BS/MA/Artm

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Expected Learning Outcomes for General Education at MJC

For students who complete MJC-GE, CSU-GE, or IGETC to fulfill GE requirements for the associate degree at MJC

UPON COMPLETION OF AN ASSOCIATE’S DEGREE AT MODESTO JUNIOR COLLEGE, THE STUDENT WILL BE ABLE TO:

- Demonstrate proficiency in NATURAL SCIENCE by:
  - Explaining how the scientific method is used to solve problems.
  - Describing how scientific discoveries and theories affect human activities.

- Demonstrate proficiency in SOCIAL AND BEHAVIORAL SCIENCE by:
  - Describing the method of inquiry used by the social and behavioral sciences.
  - Describing how societies and social subgroups have operated in various times and cultures.
  - Analyzing the ways that individuals act and have acted in response to their societies.

- Demonstrate proficiency in the HUMANITIES by:
  - Demonstrating awareness of the various ways that culture and ethnicity affect individual experience and society as a whole.
  - Demonstrating the ability to make well considered aesthetic judgments.

- Demonstrate proficiency in LANGUAGE AND RATIONALITY by:
  - Demonstrating awareness of the interactive nature of communication involving effective listening, reading, writing, and speaking.
  - Demonstrating critical thinking in the analysis and production of communication.
  - Demonstrating the ability to find, evaluate, and use information in a variety of formats.

- Demonstrate proficiency in HEALTH EDUCATION by:
  - Describing the integration of the physiological and psychological human being.
  - Analyzing the development of self and making plans for lifelong learning.
  - Evaluating the impact of daily decisions on life and health.

*Replaces Curriculum Committee Guidance Activities approvals effective Summer 2011. Revised 02/09/11 RAC/bs
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 “Planning Your Education” on page 60 of the 2011-2012 MJC Catalog.

### Area A. Natural Sciences: Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 376</td>
<td>Basic Sci &amp; Lab Techniques (3)</td>
<td>1</td>
</tr>
<tr>
<td>ANAT 125</td>
<td>Human Anatomy (4)</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>Intro to Animal Science (3)</td>
<td>1</td>
</tr>
<tr>
<td>ANTHR 101</td>
<td>Physical Anthropology (3)</td>
<td>1</td>
</tr>
<tr>
<td>AP 10</td>
<td>Elem Human Anat-Phys (3)(F96)</td>
<td>1</td>
</tr>
<tr>
<td>AP 50</td>
<td>Elem Human Anat-Phys (3)(F96)</td>
<td>1</td>
</tr>
<tr>
<td>AP 150</td>
<td>Integrative Anat &amp; Physiology (5)</td>
<td>2</td>
</tr>
<tr>
<td>ASTR 134</td>
<td>Intro to Modern Astronomy (3)</td>
<td>1</td>
</tr>
<tr>
<td>BIOC 100</td>
<td>Basic Biology (3)(F97)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 101</td>
<td>Introductory College Chem (5)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 111</td>
<td>Intro to World Lit 1600 to Present (3)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 113</td>
<td>Intro to World Literature (3)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 144</td>
<td>Fund of Org &amp; Biochem (4)(SU00)</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 147</td>
<td>Earth Science (4)</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 152</td>
<td>Intro to Marine Verteb. (3)(SU00)</td>
<td>1</td>
</tr>
</tbody>
</table>

### Area B. Social & Behavioral Sciences: Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJS 201</td>
<td>Intro to Admin of Justice (3)</td>
<td>2</td>
</tr>
<tr>
<td>ADJS 225</td>
<td>Introduction to Corrections (3)(SU07)</td>
<td>1</td>
</tr>
<tr>
<td>AGEC 125</td>
<td>Elem of Environmental Sci (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>AGEC 147</td>
<td>Ag. Environ. &amp; Soc (3)(F97)</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 102</td>
<td>Cultural Anthropology (3)</td>
<td>1</td>
</tr>
<tr>
<td>ANTH 140</td>
<td>Medical, Wildlife, &amp; Polit (3)(F97)</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>Business Communication (3)</td>
<td>1</td>
</tr>
<tr>
<td>CMPSC 103</td>
<td>Symbolic Logic (3)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Macroeconomic Principles (3)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 215</td>
<td>Macroeconomic Principles (3)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 220</td>
<td>Principles of Macroeconomics (3)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 221</td>
<td>Principles of Macroeconomics (3)</td>
<td>1</td>
</tr>
</tbody>
</table>

### Area C. Humanities: Complete a minimum of three (3) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 104</td>
<td>Linguistic Anthropology (3)</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 117</td>
<td>History of Architecture 1 (3)</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 119</td>
<td>History of Architecture 2 (3)</td>
<td>1</td>
</tr>
<tr>
<td>ART 160</td>
<td>Magic, Witchcraft &amp; Religion (3)(F97)</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>Child Growth and Devt (3)</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>Child Growth &amp; Devt 1600 to Present (3)</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 204</td>
<td>Principles of Mgmt (3)</td>
<td>1</td>
</tr>
<tr>
<td>CLOD 103C</td>
<td>Macrosoc: Values &amp; Policy (3)</td>
<td>1</td>
</tr>
<tr>
<td>CLOD 105C</td>
<td>Child Devt Prof of Child-Adol (3)(SU10)</td>
<td>1</td>
</tr>
<tr>
<td>CLOD 130</td>
<td>Diversified Settings (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 101</td>
<td>Principles of Macroeconomics (3)</td>
<td>1</td>
</tr>
<tr>
<td>ECON 102</td>
<td>Principles of Macroeconomics (3)</td>
<td>1</td>
</tr>
</tbody>
</table>

### Area D. Language & Rality: Complete D1 and D2 as indicated for six (6) units.

#### Area D. English Composition: Complete three (3) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 161</td>
<td>Film Appreciation (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 162</td>
<td>History of Cinema (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 163</td>
<td>History of Shakespeare (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 164</td>
<td>History of African Lit (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 165</td>
<td>History of the US-Post Civil War (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 166</td>
<td>History of Latin America (3)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 167</td>
<td>History of the US (3)(SU07)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 168</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 169</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 170</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 171</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
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</tr>
<tr>
<td>ENGL 172</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
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<tr>
<td>ENGL 173</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
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<tr>
<td>ENGL 174</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
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</tr>
<tr>
<td>ENGL 175</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 177</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 178</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 179</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 180</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 181</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 182</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 183</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 184</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 185</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 186</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 187</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 188</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 189</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 190</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 191</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 192</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 193</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
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</tr>
<tr>
<td>ENGL 194</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Area D. English Composition: Complete three (3) units.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 195</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 196</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 197</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 198</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 199</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
<tr>
<td>ENGL 200</td>
<td>History of the US from the 16th Cent (3)(F02)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Supplemental Materials**

- **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** (ADV, VNA) satisfy the Health Ed requirement by completion of major requirements.

*Replaces Curriculum Committee MJC-GE approvals effective Summer 2010. Revised 02/09/11 RAC bs.
The CSU-GE pattern is one option that allows California community college transfer students to fulfill the lower-division general education requirements of any California State University (CSU) campus. The curriculum consists of a 39-unit pattern with five areas of concentration (Area A-E). The CSU History, Constitution, and American Ideals requirement may also be completed at MJC prior to transfer. All courses must be passed with a grade of "C" or higher. "P" or "CP" CSU-GE is not the only way to fulfill the lower division GE requirements of a CSU campus prior to transfer. It is recommended that students consult with a counselor or enroll in a Guidance class to ensure their individual educational goals are being met. Request for complete or partial area CSU-GE Certification must be made in the Records Office, Morris Building, Room 105. For information see "Certification of General Education" on page 64 in the 2011-2012 MJC catalog. Patterns reflecting new CSU-GE approvals for 2011-2012 will be available in Counseling, July 2011.

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**AREA A**

**English Language, Communication, and Critical Thinking**

Four (4) units required, including a minimum of two (2) units from the following categories: English Composition, Critical Thinking, Oral Communication, Written Communication, and/or Scientific Inquiry.

**A.1 ORAL COMMUNICATION**

SPECOM 100 Fundamentals of Public Speaking (3)

**A.2 WRITTEN COMMUNICATION**

ENGL 101 Comp and Reading (3)

**A.3 CRITICAL THINKING**

CMPSIC 103 Symbolic Logic (3)

ENGL 103 Adv. Comp. & Crit. Think. (3)

PHILO 103 Symbolic Logic (3)

PHILO 105 Reasoning (3)

PHILO 107 Philo of Science (3) (F93)

CMPSIC 104 Argumentation (3)

CMPSIC 107 Intro to Debate (3) (F90)

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**AREA B**

**Scientific Inquiry and Quantitative Reasoning**

Nine (9) units required, including at least two courses from the following categories: Mathematics and Quantitative Reasoning, Life Science, Physical Science, and/or Arts & Humanities. One course from B.1 or B.2 must be a laboratory course (marked with an asterisk (*)).

**B.1 PHYSICAL SCIENCE**

GEOL 105 Geol of California (3)

GEOL 106* Historical Geol (4) (F90)

METEO 151 Intro to Meteorology (4)(S08)

NR 200* Soils (4) (F04)(F94)

PHSCI 161 Science Matters (3)

PHSCI 161-164 Science Matters/Lab (3-1) (F91)

PHYS 101* Gen Phys: Mechanics (6)

PHYS 102* Gen Phys: Waves, Therm, Optics (5)

PHYS 103* Gen Phys: Elect, Mag, & Mod Phys (5)

PHYS 142* Mech, Heat & Waves (5)

PHYS 143* Electricity, Magnetism, Optics,.. (5)

PHYS 150 Descrip Intro to Physics (3)

PHYS 160-164* Descrip Intro to Physics/Lab(3-1)(F97)

PHYS 165* Introductory Physics (5)

PHYS 180* Conceptual Physics: Hands On (4)(S08)

**B.2 LIFE SCIENCE**

ANAT 125* Human Anatomy (5)

ANSC 100 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 Anal PHYS (5)

BIO 101* Biological Principles (5)

BIO 111* General Biology (4)

BIO 114* General Ecology (4) (SU10)

BIO 115 Genetics, Evol & Soc (3) (F97)

BIO 116* Biology: A Human Perspective (4)(S08)

BIO 120 Introduction to Marine Vertebrates (3) (S07)

BIO 130 Introduction to Marine Vertebrates (3-1) (S07)

BIO 140 Intro to Marine Biology (4)

BIO 140 Intro to Freshwater Biology (4)

BOL 101* General Botany (4)

BOL 110* Plant Biology (3)

ENSCH 108 Env. Conservation (3) (F97)

MICRO 101 Microbiology (4) (F94)

PHYS 101* Intro Human Physiology (5)

PHYS 103 Introduction to Neuroscience (3)(S08)

PLSC 200 Intro to Plant Science (3)

PSYCH 103 Introduction to Neuroscience (3)(F90)

ZOOL 101* General Zoology (4)

ZOOL 115* Animal Biology (2)

**B.3 LABORATORY ACTIVITY**

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

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**B.4 MATHEMATICS AND QUANTITATIVE REASONING**

CMPSIC 219 Discrete Structures for Computer Sci. (4)(S10)

MATH 101 Math Ideas and Applications (3) (F90)

MATH 106 Structure of Mathematics (1) (4)

MATH 106 Structure of Mathematics 2 (4) (F93)

MATH 111 Applied College Algebra (3) (F02)

MATH 121 Pre-Calculus 1 (5) (F90)

MATH 122 Pre-Calculus 2 (5) (F90)

MATH 130 Finite Mathematics (3)

MATH 134 Elementary Statistics (5)

MATH 138 Calculus for Business (3)

MATH 171 Calculus: First Course (5)

MATH 172 Calculus: Second Course (5)

MATH 173 Calculus: Third Course (5) (S07)

MATH 174 Intro. to Linear Alg. & Ord. Diff. Eq. (5)(S08)

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**AREA C**

**Arts and Humanities**

Nine (9) units required, including 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 (ARTS, DANCE, MUSIC, THEATRE)**

ARCH 117 History of Architecture 1 (3)

ARCH 118 History of Architecture 2 (3)

ART 102 Intro to Computer Graphics (3)(F96)

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 Hist of Renaissance Art (3) (F92)

ART 163 Hist 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)

CMGRPR 202 Intro to Computer Graphics (3)(F96)

ENGL 161* Film Appreciation (4) (F95)

FLM 154 Movies with a Message (3)(F97)

FLM 155 The Documentary Film (3) (SU07)

INDTS 150 Hist. of Interiors-Decor. Arts 1 (3) (SU10)

MUSG 101 Music Appreciation (3)

MUSG 102 Moves 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 121 Music Theory 1 (3) (F90)

MUST 122 Music Theory 2 (3) (F91)

MUST 123 Music Theory 3 (3) (F93)

MUST 124 Music Theory 4 (3) (F93)

PE 194* Intro to World Dance (3) (F03)

SOCSCI 154 Moves with a Message (3)(F07)

SPOCOM 120 Oral Read & Interpretation (3)

SPOCOM 122 Intro to Readers’ Theatr (3)

SPOCOM 123 Storytelling (3)(F00)

SPOCOM 124 Advanced Readers’ Theatre (3)

THETR 100 Intro to Theatre Arts (3)

THETR 102 World Theatre (3) (F95)

THETR 106 Oral & Interpret (3)

THETR 112 Intro to Readers’ Theatr (3)

THETR 123 Storytelling (3)(F90)

THETR 124 Advanced Readers’ Theatre (3)

THETR 150* Elements of Playwrighting (3) (F94)

THETR 160 Fundamentals of Acting (3)

THETR 161 Intermediate Acting (3)

THETR 165 History of American Music Theatre(3)(F92)

THETR 194 Intro to World Dance (3) (F01)

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Updated 02/09/2011 to reflect CSU-GE approvals as of March 25, 2010. RAC/b
C.2 HUMANITIES (LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGES)

ANTHR 104* Linguistic Anthropology (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 & Short 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 to Present (3)
ENGL 135 Survey of American Lit to 1850 (3)
ENGL 136 Survey of American Lit to 1850 to Present (3)
ENGL 137 Survey of Eng Lit to 18th Century (3)
ENGL 138 Survey of Eng Lit 1700-Present (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 169 Adolescent Lit (3) (F00)
ENGL 170 Chinese Lit (3)
ENGL 171 Intro African-Amer Lit (3) (F90)
ENGL 172 Intro to Chicano/a Lit (3) (F90)
ENGL 173 Intro Latin Amer Lit (3) (F93)
ENGL 174 Intro to Asian Lit (3) (SU07)
ENGL 175 Introduction to Women's Literature (3)
ENGL 176 Intro to Mexican Lit (3) (F04)
ENGL 179 Intro to Afric Amer Lit, Myth & Oral Trad (3) (F95)
FOREIGN LANGUAGE numbered 101, 102, 103, 104 (3)
HIST 110* World Civil. to the 18th Century (F07)
HUMAN 101 Intro to the Humanities (3)
HUMAN 105 Early Humanistic Trad (3) (F98)
HUMAN 106 Humanities in the Modern World (3) (F98)
HUMAN 110 East Meets West (3) (F07)
HUMAN 130 Introduction to Western Religions (3) (F03)
HUMAN 140 Intro to World Mythologies (3) (SU06)
PHILO 101 Philosophy (3)
PHILO 111 Ethics: Theory & Appl (3)
PHILO 113 Philosophy of Art (3) (SU08)
PHILO 115 Religion: A Phil. & Comparative Inquiry (3)
PHILO 120 Hist of Philo: Ancient (3)
PHILO 121 Hist of Philo: Modern (3)
PHILO 123 20th Century Philosophy (3) (F02)
PHILO 135 Environmental Ethics (3) (F98)
PHILO 140 Philosophy & Film (3) (F93)
SIGN 125 ASL - Beginning (3) (F96)
SIGN 126 ASL - Intermediate (3) (F96)
SIGN 127 ASL - Advanced (3) (F96)
SPAN 109 Span. for Spanish Spkr 2 (SU07)
SPAN 110 Span. for Spanish Spkr 2 (3) (SU07)
SPAN 112 Intro to Chicano/a Lit (3) (F90)
SPAN 173 Survey of Latin Amer Lit (3) (SU06)
THTR 150* Elem of Playwriting (3) (F94)

D.1 ANTHROPOLOGY & ARCHAEOLOGY

ANTHR 101* Physical Anthropology (3) (F90)
ANTHR 102 Cultural Anthropology (3)
ANTHR 104* Linguistic Anthropology (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 Principles of Macroeconomics (3)
ECON 115* Econ Hist of the US (3)
ECON 116 Econ Hist of the US (3)
HIST 115* Econ Hist of the US (3)

D.3 ETHNIC STUDIES

HIST 129* History of Mexico (3)
HIST 145* History of Latin American (3)
HIST 154* Afr. Amer thru 18th Century (3) (F96)
SOCIO 150* Ethnic Culture in America (3)
SOCIO 155* Afr. Amer Culture & Communities (3)
SOCIO 156* Mex Culture in the US (3)
SPCOM 130* Intercultural Communication (3) (F92)

D.4 GENDER STUDIES

PSYCH 111* Psychology of Gender (3) (SU07)
SOCSCI 105 Women’s Studies (3) (F01)

D.5 GEOGRAPHY

GEOG 105* Economic Geography (3) (SU07)
GEOG 106 Geography of the World (3) (F98)
GEOG 110 World Regional Geography (3) (SU07)

D.6 HISTORY

HIST 101 History of the US to 1877 (3)
HIST 102 History of the US - Post Civil War (3)
HIST 104 Western Civilization to 1850 (3)
HIST 105 Western Civilization Since 1850 (3)
HIST 106* World Civ to the 16th Century (3) (F02)
HIST 107 World Civ. from the 16th Century (3) (SU07)
HIST 112 Twentieth Century Amer (3)
HIST 113 Soc. & Cult Hist of US Prior to 20th Cent (3)
HIST 114 Soc. 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) (F00)
HIST 125 History of Mexico (3)
HIST 126 History of Afr. Amer Frontier (3) (F94)
HIST 127 History of California (3)
HIST 145* History of Latin American (3)
HIST 154* Hist Afr. Amer. thru 19th Cent (3) (F96)
HIST 155* Afr. Amer. in 20th-21st Century (3) (F98)

D.7 INTERDISCIPLINARY SOCIAL OR BEHAVIOR SCIENCE

AGEC 146 Ag, Envr & Soc. (3) (F97)
CLDDV 104 Child Growth/Development (3) (F07)
CLDDV 105 Child Growth/Dev (complete sequence) (2-2) (F07)
FAMILY 131 Family Relationships (3)
HE 110 Healthful Living (3)
HE 111 Women’s Health Issues (3)
PSYCH 101 Social Psychology (3)
PSYCH 110 Human Sexuality (3)
PSYCH 130 Personal Adjustment (3)
PSYCH 141 Human Lifespan (3)

Total Units required for General Education: 39
Group 3B. Humanities

ANTHR 104* Linguistic Anthropology (3)(S07)
ENGL 102 Adv Comp & Intro to Lit (3)(S07)
ENGL 112 Intro Novel & Short Story (3)
ENGL 114 Intro to Poetry (3)
ENGL 116 Intro to Drama (3)
ENGL 111 Intro to World Lit to 1500 (3)
ENGL 112 Intro to World Lit 1500 to Present (3)
ENGL 135 Survey of American Lit to 1850 (3)
ENGL 136 Survey of American Lit 1850 to Present (3)
ENGL 137 Survey of English Lit 1700-Present (3)
ENGL 151 Folklore (9)(F01)
ENGL 156 Bible as Lit: Hebrew Canon and... (3)
ENGL 157 Bible as Lit: New Testament (3)
ENGL 161 Film Appreciation (4) (S05)
ENGL 162 History of Cinema (3) (F03)
ENGL 163 Intro to Shakespeare (3)
ENGL 168 Adolescent Literature (3)(S07)
ENGL 169 Children's Literature (3)(S07)
ENGL 171 Intro African-American Lit (3)
ENGL 172 Intro to Chicano/a Lit (3) (F95)
ENGL 173 Intro to Latin American Lit (3) (F95)
ENGL 174 Intro to Modern Asian Lit (3) (S05)
ENGL 175 Introduction to Women's Literature (3)
ENGL 176 Intro to Mexican Literature (3)(S05)
ENGL 179 Intro Nat.Amer Lit Myth-Oral Trad (3)(F99)
FREN 102 French 2 (3)(S07)
FREN 103 French 3 (3)
FREN 104 French 4 (3)
GERM 102 German 3 (S07)
HIST 106* World Civ. to 16th Century (3)(S07)
HUMAN 110 Intro to the Humanities (3)
HUMAN 105 Early Humaristic Traditions (3)
HUMAN 106 Human in Modern World (3)
HUMAN 110 East Meets West (3)
HUMAN 130 Intro. to Western Religions (3) (S05)
HUMAN 140 Intro to World Mythologies (3) (S05)
PHLO 101 Philosophy (3)
PHLO 111 Ethics: Theory & Appl (3)
PHLO 113 Philosophy of Art (3) (S05)
PHLO 115 Religion: Philo & Comp (3)
PHLO 120 Hist of Philosophy: Ancient (3)
PHLO 121 Hist of Philosophy: Modern (3)
PHLO 123 Twentieth Century Philosophy (3)(F02)
PHLO 125 Environmental Ethics (3)(F09)
PHLO 140 Philosophy & Film (3)(S07)
SIGN 126 ASL - Int Comm. w/ the Deaf (3)(F97)
SIGN 127 ASL - Adv Comm. w/ the Deaf (3)(F97)
SPAN 102 Spanish 2 (5)(F08)**
SPAN 103 Spanish 3 (5)(F92)
SPAN 104 Spanish 4 (5)(F92)
SPAN 112 Intro to Chicano/a Lit (3)**
SPAN 113 Survey of Latin American Lit (3) (S07)

Group 4A. Anthropology & Archaeology

ANTHR 102 Cultural Anthropology (3)
ANTHR 104* Linguistic Anthropology (3)(S07)
ANTHR 130 Archaeology & Cult Prehist (3)
ANTHR 140 Magic, Witchcraft, and Religion (3)(S07)
ANTHR 150 Native People of North America (3)

Group 4B. Economics

ECON 101 Principles of Macroeconomics (3)
ECON 102 Principles of Microeconomics (3)
ECON 115/HIST 115* Econ History of the US (3)**
HIST 115/ECON 115* Econ History of the US (3)**

Limitations of IGETC

IGETC is not recommended for certain UC colleges and majors. Please see IGETC Considerations on page 76 of the 2011-2012 Catalog.

Updated 03/01/2011. RACbs
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 C minus or better in each course. The two years must be in the same language.

2) Complete one of the following MUC courses with a grade of "C" or better. The more advanced courses can also be used to satisfy IGETC: 3B requirement.

FREN/GERM/SPAN**/ITAL101(SF97)**
FREN/GERM/SPAN**/102 (F98)
SPAN 103 (S07)
SPAN 110 (F95-SU06)
SPAN 112** (F98)

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 IGEC 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 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: 500/540
German/German with Listening: 500/510
Hebrew (Modern): 500/470
Italian: 500/520
Japanese with Listening: 500/505
Korean/Korean with Listening: 500
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.

9) If an achievement test (credit by exam) is not available, a faculty member associated with a United States accredited institution of higher learning can verify a student's competence. The institution 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.)
Transfer to California State University (CSU)

The California System of State Universities and Colleges provides upper-division educational programs for California community college transfer students. Students can select from the following campuses:

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

(5) = Semester system; (Q) = Quarter system

All the campuses of the California State University welcome applications from transfer students. If you complete college units after the summer following graduation from high school, you are considered a transfer student. The number of units you have completed at the time you enter a CSU is an upper-division applicant. Students planning to transfer to a CSU should plan a program to meet the admissions and graduation requirements of the specific institution that they plan to attend. They should also select courses that prepare them for upper-division study in their major or fulfill recommended general education requirements. Transfer admission eligibility is based on transferable college units (courses numbered 100-299 at MJC) and/or high school record(s) and test scores. Each institution has its own requirements for admission and junior standing.

UPPER DIVISION TRANSFER ADMISSIONS REQUIREMENTS

1. Transfer students are eligible for admission with junior status with 60 or more transferable semester units or 90 quarter units if they:
   2. Maintain a college GPA of 2.00 or better (2.40 for non-California residents) in all transferable college units attempted.
   3. Are in good standing at the last college or university attended, i.e., eligible to re-enroll.
   4. Will complete prior to transfer at least 30 semester units (45 quarter units) of general education courses which include the Golden Four: Oral Communication, English Composition, Critical Thinking, and College Mathematics, with grades of "C" or better in each of the 30 units. The Golden Four categories appear on the CSU-GE Transfer Pattern as Areas A1, A2, A3, and B4.
   5. Will complete additional general education units that comprise the total CSU general education pattern of 39 units.

Please be advised that these are minimum entrance requirements and that they do not guarantee admission to any of the 23 CSU campuses. Many CSU campuses are currently requiring completion of all general education, as well as completion of all lower division major preparatory course work offered at the community college you are attending. GPA requirements will vary with the applicant pool and majors you are pursuing.

PLANNING FOR CSU WHILE ATTENDING MJC

The following checklist will help you correctly apply, optimize the chances of attending the CSU of your choice and make sure you get credit for all applicable courses.

- Meet with your MJC counselor or go to the transfer center to discuss your transfer plans and to find out any additional information you need to know.
- Use CSUMentor, http://www.csumentor.edu/planning/transfer/ a free online resource, to check the CSU’s admission requirements, application fees, tuition rates, testing, application dates and other commonly asked questions.
- Refer to ASSIST, http://www.assist.org an online student-transfer information system, to find how the credits you have earned at one public California college or university can be applied when transferring to another school.
- Check your final college transcripts before sending them to the CSU. All transfer applicants are required to submit final college transcripts prior to enrollment in CSU classes to verify their successful completion of all admission requirements. If you did not complete the courses needed for admission, the CSU campus to which you apply may delay or cancel your admission or enrollment until you have successfully completed these requirements. (A few CSU campuses admit transfer students based on courses “in progress;” others do not.) More information is available at CSU Mentor.
- Check with your California Community College Transfer Center to see if you are eligible for a Transfer Admissions Agreement (TAA) or a Transfer Admissions Guarantee (TAG), which secures you a place at the selected campus specified in the agreement.
- Find out if the CSU campus(es) and the programs you are applying to are “impacted” and what supplemental admission criteria is being used. Several CSU campuses receive more applications during the initial filing period than can be accommodated; these campuses are designated “impacted” and may impose supplemental admission criteria for transfer admission. In addition, a number of CSU campuses also have programs or majors that are impacted, which requires them to impose more selective admission criteria in determining student eligibility. For more information, see the CSUMentor Impaction Web page, http://www.csumentor.edu/planning/transfer/impaction.asp.

Source of information: http://www.csumentor.edu/planning/transfer/
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 (S)
- University of California, Davis (Q)
- University of California, Irvine (Q)
- University of California, Los Angeles (Q)
- University of California, Merced (S)
- University of California, Riverside (Q)
- University of California, San Diego (Q)
- University of California, San Francisco (Health Sciences)
- University of California, Santa Barbara (Q)
- University of California, Santa Cruz (Q)

JUNIOR-LEVEL TRANSFER

The vast majority of transfer students go to the University at the junior level from California community colleges. To be eligible for admission as a junior transfer student, a student must fulfill both of the following criteria:

1. Complete 60 semester (90 quarter) units of UC transferable college credit with a GPA of at least 2.4 (2.8 for nonresidents). No more than 14 semester (21 quarter) units may be taken Pass/Not Pass.

2. Complete the following course pattern requirements, earning a grade of C or better in each course:
   - Two transferable college courses (3 semester or 4–5 quarter units each) in English composition;
   - One transferable college course (3 semester or 4–5 quarter units) in mathematical concepts and quantitative reasoning;
   - Four transferable college courses (3 semester or 4–5 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences.

If a student satisfies the Intersegmental General Education Transfer Curriculum (IGETC) prior to transferring, he or she may satisfy part 2 of the transfer eligibility requirements.

In addition to meeting the minimum admission requirements, a student should adhere to any special application or screening procedures for the selected major or UC campus. Additional requirements for highly competitive majors can also be identified through articulation agreements (available at www.assist.org) and campus General Catalogs. Students should enroll in the courses that meet these requirements. To earn 60 semester units before transferring, the student should select courses that meet the eligibility, lower-division major-preparation and appropriate general education/breadth requirements.

PLANNING FOR UC WHILE ATTENDING MJC

Prospective transfer applicants should plan their coursework carefully. Their courses should help them meet the minimum admission requirements for transfer. They also should select courses that prepare them for upper-division study in their major or fulfill recommended general education requirements. All courses students take to meet University requirements must be transferable.

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 uctransfer.universityofcalifornia.edu, other information helpful to 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 and www.ccctransfer.org. 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.

TRANSFER ADMISSION GUARANTEE (TAG)

Seven UC campuses (Davis, Irvine, Merced, Riverside, San Diego, Santa Barbara, and Santa Cruz) offer guaranteed admission to California community college students who meet specific requirements. By participating in a Transfer Admission Guarantee (TAG) program, students receive early review of their academic records, early admission notification, and specific guidance about major preparation and general education coursework. For more information, see www.uctransfer.universityofcalifornia.edu/tag.

Intersegmental General Education Transfer Curriculum (IGETC)

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses prospective transfer students attending California community colleges may complete at the community college to satisfy the lower-division breadth/general education requirements at both the University of California and the California State University. Visit www.ccctransfer.org/main-page for details of standards adopted in June 2010.

Students have the option of completing IGETC or the specific lower-division general education requirements of the school or college at the campus they plan to attend. The University has an agreement with each California community college specifying which of its courses may be applied to each category of IGETC. All courses must be completed with a grade of C (not C-) or better. A grade of Credit or Pass may be used if the community college's policy states that it is equivalent to a grade of C or better.

IGETC is most helpful to students who know they want to transfer but have not yet decided upon a particular institution, campus or major. Certain students, however, will not be well-served by following IGETC. Students who intend to transfer into majors that require extensive lower-division preparation, such as those in engineering or the physical and natural sciences, should concentrate on completing the many prerequisites for the major that the college screens for to determine eligibility for admission. See IGETC Considerations section.

IGETC is not an admission requirement. Completing it does not guarantee admission to the campus or program of choice. However, completing the lower-division breadth/general education requirements — whether through IGETC or the campus-specific requirements — may be considered.
Students who do not complete IGETC before transferring will be required to satisfy the specific lower-division general education requirements of the UC college or school they attend. California community colleges may grant partial certification of IGETC to students who are missing no more than two requirements. Students submitting partial IGETC certification should complete the missing requirements at either UC or a California community college as designated by their department. Students who have been granted partial IGETC certification should not return to the community college for a full certification.

A community college course can satisfy only one IGETC subject area even if it is listed on the IGETC Course Agreement in more than one area. The exception being courses that appear in Area 6A and IGETC, Area 3B; these courses can be used to satisfy both areas. However, a single course may be counted toward IGETC and a major requirement. IGETC course credit may be earned for scores of 3, 4 or 5 on Advanced Placement (AP) exams. Visit the AP section of the MJC catalog for more information. Full or partial certification of IGETC completion is the responsibility of the last community college a student attends prior to transfer. Requests for IGETC certification must be made in the MJC Records Office (Morris, 105).

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 by the end of spring term for fall admission 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. Students in the College of Engineering who have satisfied IGETC are still required to complete two upper-division general education courses at UC Davis to satisfy College of Engineering requirements.

IRVINE: All schools accept IGETC. However, selection by the campus in selecting among qualified applicants.

LOUISIANA: 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 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. For details, see student.engr.ucr.edu/breadth.html. However, prospective applicants are strongly encouraged to focus instead on preparatory coursework for their desired major, such as mathematics, science and other technical preparatory coursework, rather than on IGETC completion. Strong technical preparation is essential for success in the admissions process and, subsequently, in all coursework at Bourns. The College of Natural and Agricultural Sciences does not accept IGETC, although courses taken to satisfy IGETC may be applied toward the college’s breadth pattern. The College of Humanities, Arts, and Social Science and the School of Business Administration accept 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 2011-2012: 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.
What is the 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.

BENEFITS OF PARTICIPATING

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 into English 101 at MJC for students who meet appropriate Honors Program deadlines

**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.

**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).

**PROOF OF PARTICIPATION**

Honors courses completed will be noted on your official MJC transcript.

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To apply to the program:

1. Make an appointment with the Honors Program Coordinator in Founders Hall 173.
2. To receive an Honors Program Application packet contact Eva Mo at moe@mjc.edu. In this application you will need to demonstrate the following:
   a. Eligibility for English 101 or higher at time of application
   b. 3.25 community college GPA (12 units) or 3.5 credentialed High School GPA or recent 1050 SAT or recent 25 ACT
   c. One letter of recommendation (see application)
   d. One ‘statement of purpose’ 500 word-essay (see application)
3. Attend honors orientation before starting your first honors semester.

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.
Intradistrict Course Equivalencies
Between Modesto Junior College and Columbia College

As members of the Yosemite Community College District, Columbia College and Modesto Junior College have established articulation agreements allowing students to use specific courses taken at either college to satisfy prerequisites and program requirements at either Institution. The below list represents the most current course equivalencies at the time this publication went to print. Evaluation of course equivalencies occurs throughout the year. If you are interested in learning whether another course taken at either institution is equivalent to a specific course, you should contact the MJC Evaluators at (209) 575-6033 or (209) 575-6040.

### MJC / COLUMBIA

<table>
<thead>
<tr>
<th>MJC Course</th>
<th>COLUMBIA Course</th>
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<tbody>
<tr>
<td>ANAT 125</td>
<td>BIOL 10</td>
</tr>
<tr>
<td>ANAT 125+PHYSIO 101</td>
<td>BIOL 10+60</td>
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<tr>
<td>ANTH 102</td>
<td>ANTH 2</td>
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<tr>
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*Updated 01/26/11 by RAG(MJC)/JM(CC)/lsm
PLANNING YOUR EDUCATION

Parking

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 local ordinances.**

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 Safety. 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:

- Permits are required anytime a vehicle is parked anywhere on MJC property, except on Saturday, Sunday, school holidays, and Fridays after 5 p.m.
- 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.
- 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).
- 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.
- Campus Safety 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.
- 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:

- East—Parking Lot 103 (between Science and Coldwell): Staff (A, T), handicap, or guests.
- East—Lot 101 (near Baseball Field): Only Semester/Annual permits (A, T, S) until 12:00 Noon.
- West—Lot 209 (near Child Care): Semester/Annual permits (A,T,S) until 12:00 PM.
- Area in front of MICL Building: MICL Permit Holders from 8:00 AM-2:00 PM
- 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. Campus Safety 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 fee 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.
SAFETY ON CAMPUS

Safety on Campus

Campus Safety Operations
John Muir Hall, Room 151   Phone: (209) 575-6351
Hours: Sunday - Saturday (24 hours)

EMERGENCIES: 911
Phone: (209) 575-6911
Accidents (On-Campus) (209) 575-6038 (College Nurse)

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 local law enforcement reported the following crimes on or adjacent to the Modesto Junior College campus for 2006 - 2008.

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CAMPUS SECURITY ACT
The Annual Security Report is available upon request from Campus Safety/Security at (209) 575-6005, or online at http://www.mjc.edu/general/information/safety/.

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.

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 Student Services offer education and information on drug and/or alcohol use and also can refer students to community agencies for counseling or rehabilitation. Pamphlets and literature are available through the Health Services Web site at www.mjc.edu/health services. Call 575-6038 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 Safety officers or Security Escorts are available during day and evening hours to escort students to their cars. An escort may be requested by calling Campus Safety 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 Safety.
• Use well-lighted walkways.
• Park in well-lighted areas, away from shrubbery and trees.
• Always lock your car and take your keys.
• Do not leave valuables in your vehicle.

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.
Educational Programs

Associate’s Degrees, Certificates of Achievement, and Skills Recognition Awards offered at Modesto Junior College

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
Agriculture: Sales, Service PROGRAM

The student will learn the basic skills of sales techniques, presentation of product, evaluation of product, sales abilities, sales and management skills and sales success. This program will help students develop these skills through on-the-job internships and courses designed to prepare them for related careers.

Certificate of Achievement: Agriculture: Sales, Service Technician

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
AG 115 [1] Introduction to Agricultural Education and Careers ........................................... 1
AG 145A [M] Work Experience (for a total of 4 units)** ................................................. 4
AG 249 [M] Agriculture Internship** .................................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
PLSC 280 [M] Introduction to Plant Science .................................................................. 3
AGEC 280 [M] Introduction to Animal Science ................................................................. 3
NP 280 [M] Soil .................................................................................................................. 4
AGM 280 [M] Introduction to Agricultural Technology ...................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 18 UNITS
AGEC 210 [1,2] Elements of Agricultural Economics ..................................................... 3
AGEC 280 [M] Agricultural Sales and Services ................................................................ 3
PLSC 200 [M] Introduction to Human Communication .................................................. 3
AGEC 280 [M] Agricultural Communications ................................................................ 3
AG 215 [NP] Agricultural Marketing ................................................................................ 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................................. 32

**Required

A.S. Degree: Agriculture: Sales, Service

• To earn an A.S. Degree, the student must complete the MJC Associate Degree

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS
AG 115 [1] Introduction to Agricultural Education and Careers ........................................... 1
AG 145A [M] Work Experience (for a total of 4 units)** ................................................. 4
AG 249 [M] Agriculture Internship** .................................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
PLSC 280 [M] Introduction to Plant Science .................................................................. 3
AGEC 280 [M] Introduction to Animal Science ................................................................. 3
NP 280 [M] Soil .................................................................................................................. 4
AGM 280 [M] Introduction to Agricultural Technology ...................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS
AGEC 210 [1,2] Elements of Agricultural Economics ..................................................... 3
AGEC 280 [M] Agricultural Sales and Services ................................................................ 3
PLSC 200 [M] Introduction to Plant Science .................................................................. 3

A.S. Major: 30 UNITS

Animal Science PROGRAM

A.S. Degree: Animal Science

• To earn an Associate in Science Degree, the student must complete the MJC 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 145A [M] Work Experience (for a total of 4 units)** ................................................. 4
AG 249 [M] Agriculture Internship** .................................................................................. 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
PLSC 280 [M] Introduction to Plant Science .................................................................. 3
AGEC 280 [M] Introduction to Animal Science ................................................................. 3
NP 280 [M] Soil .................................................................................................................. 4
AGM 280 [M] Introduction to Agricultural Technology ...................................................... 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS
AGEC 210 [1,2] Elements of Agricultural Economics ..................................................... 3
AGEC 280 [M] Agricultural Sales and Services ................................................................ 3
PLSC 200 [M] Introduction to Plant Science .................................................................. 3

A.S. Major: 30 UNITS

Any Animal Science class not used in Area III. for major core ......................................................... [NP]
Any Agriculture class not used in Area II. for breadth core .............................................................. [NP]
Any course not to be used in either major or options. ...................................................................... [NP]

TOTAL UNITS IN A.S. MAJOR ................................................................................ 30

**Required
Educational Programs in

Agriculture &
Environmental Sciences

Mark Anglin, Dean
East Campus
Agriculture Building, Room 100
(209) 575-6200

SUPPORT STAFF
Gloria Wilson, Admin. Secretary
Don Borges, Director, Tech Prep
Rhonda Wolf, Admin. Technician

John Macedo, Instr. Support Tech
James Palmer, Instr. Support Tech
Lee Ridge, Instr. Support Tech
Julie Haynes, Program Specialist

Agriculture 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:

Crop Science, AS
Dairy Industry, AS
Dairy Industry Technician, C
Dairy Science, AS
Environmental Horticultural Science, AS
Food Processing, AS, C
Forestry, AS, C
Frut Science, AS
Heavy Machinery Management, C

Degrees and/or Certificates Offered:

Advanced Heavy Equipment Technician, C
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, C
Commercial Floristry Technician, C

Certification Requirements:

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. Major Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>AGM 215</td>
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<tr>
<td>AGM 221</td>
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<td>AGM 242</td>
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<td>AGM 245</td>
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<tr>
<td>AUTEC 317</td>
<td>NP</td>
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</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD ………………. 18

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.

Certificate of Achievement:

Advanced Heavy Equipment Technician

Expected Student Learning Outcomes

Students who earn a Certificate of Achievement in Basic Heavy Equipment Technician will be able to:

1. Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.
2. Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.
3. Select proper tools and equipment for various applications, staying within the desired financial restraints.
4. Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.
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

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Agriculture Business will be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.
6. Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.
7. Recognize world markets and describe their effect on local agriculture economies.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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></td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td></td>
<td>Work Experience ** (for a total of 4 units)</td>
</tr>
<tr>
<td>AG 249</td>
<td></td>
<td>Agriculture Internship**</td>
</tr>
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</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>AGE 210</td>
<td></td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGE 200</td>
<td></td>
<td>Agricultural Accounting and Analysis</td>
</tr>
<tr>
<td>NR 200</td>
<td></td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td></td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>ANSC 200</td>
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<td>Plant Science</td>
</tr>
<tr>
<td>ANSC 200</td>
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<td>Animal Science</td>
</tr>
<tr>
<td>FDP 376</td>
<td></td>
<td>Food Laboratory Instruments</td>
</tr>
<tr>
<td>AG 280</td>
<td></td>
<td>Agricultural Computation</td>
</tr>
<tr>
<td>FDP 200</td>
<td></td>
<td>Food Processing</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td></td>
<td>Work Experience ** (for a total of 4 units)**</td>
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</table>

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE 200</td>
<td></td>
<td>Agriculture Accounting and Analysis</td>
</tr>
<tr>
<td>AGE 210</td>
<td></td>
<td>Elements of Agricultural Economics</td>
</tr>
<tr>
<td>AGE 220</td>
<td></td>
<td>Agricultural Business Management</td>
</tr>
<tr>
<td>AGE 225</td>
<td></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.

MINIMUM UNITS IN A.S. MAJOR ................................................................. 30

**Required

Agricultural Laboratory
PROGRAM

The student will acquire skills for entry-level employment in an agricultural laboratory analyzing soil, feed, food, water, etc. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement:
Agriculture Laboratory Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Agriculture Laboratory Technician will be able to:

1. Give specific examples of careers in the general agriculture area and briefly describe the prerequisites for these careers.
2. Describe the basic workforce readiness skills needed to be successful in agriculture careers today.
3. Describe the importance of the agriculture industry to the local, state, and national economy.

MAJOR REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the course work 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>
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<tbody>
<tr>
<td>AG 115</td>
<td></td>
<td>Introduction to Agricultural Education and Careers</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td></td>
<td>Work Experience ** (for a total of 4 units)**</td>
</tr>
<tr>
<td>AG 249</td>
<td></td>
<td>Agriculture Internship**</td>
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II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
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<th>Course</th>
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<tbody>
<tr>
<td>CHEM 101</td>
<td></td>
<td>General Chemistry</td>
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<tr>
<td>CHEM 143</td>
<td></td>
<td>Introduction College Chemistry</td>
</tr>
<tr>
<td>CHEM 144</td>
<td></td>
<td>Fundamentals of Organic and Biochemistry</td>
</tr>
<tr>
<td>MICRO 101</td>
<td></td>
<td>Microbiology</td>
</tr>
<tr>
<td>FDP 379-387</td>
<td></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

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Agriculture Laboratory Technician will be able to:

1. Give specific examples of careers in the general agriculture area and briefly describe the prerequisites for these careers.
2. Describe the basic workforce readiness skills needed to be successful in agriculture careers today.
3. Describe the importance of the agriculture industry to the local, state and national economy.

MAJOR REQUIREMENTS
To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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)** Or AG 249 [NP] Agriculture Internship** ............................................................... 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS
FDP 200 [1] Basic Food Processing .................................................................... 3
AG 280 [NP] Agricultural Computations ................................................... 3
NR 200 [NP] Soils ............................................................................................. 4
AGM 200 [NP] Introduction to Mechanical Technology ........................................ 3
AGEC 210 [NP] Elements of Agricultural Economics ......................................... 3

III. AGRICULTURE MAJOR REQUIRED COURSES - COMPLETE 8 UNITS
AG 376 [3,4] Basic Science and Laboratory Techniques .................................. 3
AG 285 [T,2] Agricultural Communications ......................................................... 3
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 ................................................................. 5
CHEM 143 [NP] Introductory College Chemistry ............................................... 5
CHEM 144 [NP] Fundamentals of Organic and Biochemistry ......................... 4
MICRO 101 [NP] Microbiology ................................................................. 4
AG 285 [T,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.

MINIMUM UNITS IN A.S. MAJOR ........................................................................ 30
**Required

PROGRAM

A.S. Degree: Agricultural Science

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate's Degree in Agriculture Science will be able to:

1. Give specific examples of careers in the general agriculture area and briefly describe the prerequisites for these careers.
2. Describe the basic workforce readiness skills needed to be successful in agriculture careers today.
3. Describe the importance of the agriculture industry to the local, state and national economy.

MAJOR REQUIREMENTS
To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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)** 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 ......................................... 3
AGEC 210 [NP] Elements of Agriculture Economics ......................................... 3
AGEC 200 [2] Agricultural Accounting and Analysis ........................................... 3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS
AG 249 [NP] Agriculture Internship** ............................................................... 4
AG 115 [1] Introduction to Agricultural Education and Careers ...................... 1
AG 349A-D [NP] Work Experience (for a total of 4 units)** .................................. 4

IV. AGRICULTURE MAJOR ELECTIVE COURSES - COMPLETE 7 UNITS
AGM 210 [NP] Agricultural Welding ................................................................. 3
AGM 210 [NP] Agricultural Welding ................................................................. 3
EHS 280 [NP] Beginning Floral Design ................................................................. 3
ANSC 201 [NP] Beef Cattle Science ................................................................. 3
ANSC 202 [NP] Swine Science ................................................................. 3
ANSC 203 [NP] Sheep Science .............................................................................. 3
ANSC 230 [M,2,4] Poultry Science ................................................................. 3
EHS 210 [NP] Introduction to Environmental Horticulture ................................. 3
PLSC 230 [NP] Fruit Science ................................................................. 3

MINIMUM UNITS IN A.S. MAJOR ........................................................................ 30
**Required

A.A. Degree: University Preparation, Emphasis in Agricultural Sciences (p. 167)
Agriculture: Sales, Service PROGRAM

The student will learn step-by-step sales techniques, stage presence, self-evaluation of voice, habits, abilities in sales, and understanding of sales career. This program will help students make decisions as to whether or not they are qualified in sales, and prepare them for a sales career if they choose that vocation. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement: Agriculture: Sales, Service Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Agriculture Sales, Service Technician will be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.

CERTIFICATE REQUIREMENTS

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>
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<tbody>
<tr>
<td>AG 115</td>
<td>1</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>3</td>
</tr>
<tr>
<td>AG 249</td>
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II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
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<tr>
<td>NR 200</td>
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<tr>
<td>AGM 200</td>
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III. MAJOR REQUIRED COURSES - COMPLETE 18 UNITS

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<tr>
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<td>AGEC 280</td>
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<tr>
<td>SPCOM 100</td>
<td>3</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

A.S. Degree: Agriculture: Sales, Service

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate's Degree in Agriculture Sales and Service will be able to:

1. Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.
2. Organize and prepare reports, presentations, and other information pertaining to managerial procedures.
3. Describe the economic significance of California Agriculture and its relationship to the global economy.
4. Explain supply and demand as it relates to local and regional agriculture business industries.
5. Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.
6. Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.
7. Recognize world markets and describe their effect on local agriculture economies.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>AG 115</td>
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</tr>
<tr>
<td>AG 349A-D</td>
<td>3</td>
</tr>
<tr>
<td>AG 249*</td>
<td>4 OR</td>
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II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>AGM 200</td>
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<tr>
<td>ANSC 200</td>
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</tr>
<tr>
<td>NR 200</td>
<td>4</td>
</tr>
<tr>
<td>PLS 200</td>
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</table>

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

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</tr>
<tr>
<td>SPCOM 102</td>
<td>3 OR</td>
</tr>
<tr>
<td>AG 285</td>
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IV. ELECTIVE COURSES - COMPLETE 4 UNITS

<table>
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<th>Course</th>
<th>Units</th>
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</thead>
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<td>AG 285</td>
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<td>AGEC 220</td>
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<td>SPCOM 100</td>
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<tr>
<td>SPCOM 102</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR......................................................................................... 30

**Required
Animal Science

A.S. Degree: Animal Science

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate's Degree in Animal Science will be able to:

1. Demonstrate proficiency in agricultural sciences/engineering by employing the scientific method to solve agricultural problems.
2. Be able to employ safe work habits as prescribed in the “Injury, Illness Prevention Plan” (OOPS) for the workplace employed, including but not limited to handling and storage of hazardous materials.
3. Demonstrate mastery of the technical and soft skills needed for successful employment in the animal science industry and give specific examples of careers in the Animal Agriculture industry.
4. Give specific examples of careers in the Animal Agriculture Industry and briefly describe the prerequisites for these careers.
5. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
6. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.
7. Describe basic management techniques used by the Animal Science Industry to produce wholesome, safe, environmentally responsible animal products.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, students must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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 (for a 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
NR 200 [NP] Soils ................................................................................................................ 4
AGM 200 [NP] Introduction to Mechanical Technology ....................................................... 3
AGEC 225 [NP] Agricultural Computer Applications ....................................................... 3 OR
AGEC 210 [NP] Elements of Agricultural Economics ......................................................... 3 OR
AGEC 200 [2,3,4] Agriculture Accounting and Analysis ..................................................... 3

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

ANSN 200 [1] Introduction to Animal Science ....................................................................... 3
ANSN 201 [NP] Beef Cattle Science ..................................................................................... 3
ANSN 202 [NP] Swine Science ............................................................................................ 3
ANSN 203 [NP] Sheep Science .......................................................................................... 3
ANSN 207 [NP] Equine Science .......................................................................................... 3
ANSN 210 [1] Livestock Selection & Evaluation ................................................................. 3
ANSN 211 [2,3,4] Introduction to Meat Science ................................................................. 3
ANSN 214 [NP] Livestock, Feeding & Nutrition ................................................................. 3

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

Any 200 level Animal Science class not listed above ................................................................. [NP]
Any Agriculture class not used in Area II. for breadth core .................................................. [NP]
Any Animal Science class not used in Area III. for major core .............................................. [NP]
No more than two units of 300 level Agriculture classes .................................................. [NP]

MINIMUM UNITS IN A.S. MAJOR .................................................................................. 30

**Required

Artificial Insemination

PROGRAM

Certificate of Achievement: Artificial Insemination Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Artificial Insemination Technician will be able to:

1. Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.
2. List basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
4. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.

CERTIFICATE REQUIREMENTS

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

ANSN 201 [NP] Beef Cattle Science ..................................................................................... 3
ANSN 217 [NP] Advanced Breeding & Artificial Insemination .......................................... 4 OR
ANSN 226 [NP] Dairy Breeding & Selection ..................................................................... 3
ANSN 216 [NP] Livestock Breeding & Selection ................................................................. 3

IV. ELECTIVE COURSES - COMPLETE 3 UNITS

ANSN 224 [NP] Dairy Feeds & Feeding ............................................................................. 3 OR
ANSN 214 [NP] Livestock Feeding & Nutrition ................................................................. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ................................................ 30

**Required

87
Basic Heavy Equipment Technician PROGRAM

Certificate of Achievement: Basic Heavy Equipment Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Basic Heavy Equipment Technician will be able to:

1. Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.
2. Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.
3. Select proper tools and equipment for various applications, staying within the desired financial restraints.
4. Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.

CERTIFICATE REQUIREMENTS

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. 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 Machinery Hydraulic Systems ............................... 3
AGM 289 [NP] Principles of Power Mechanics/Small Engines .................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 16

Commercial Floristry PROGRAM

Certificate of Achievement: Commercial Floristry Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Commercial Floristry Technician will be able to:

1. List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.
2. Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.
3. Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.
4. Demonstrate good work habits and interpersonal communication skills that employers demand.

MAJOR REQUIREMENTS

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 [1] Work Experience (total of 4 units) ** .................................... 4 OR
AG 249 Agriculture Internship** ................................................................. 4

II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS

PLSC 200 [1] Introduction to Plant Science .................................................. 3
NR 200 [NP] Soils ....................................................................................... 4
AGM 200 [NP] Introduction to Mechanical Technology ............................... 3 OR
AGEC 225 [NP] Agriculture Computer Applications ................................... 3 OR
AGEC 210 [1] Elements of Agriculture Economics ................................. 3
AGEC 200 [2] Agriculture Accounting and Analysis .................................... 3

III. AGRICULTURE MAJOR COURSES- COMPLETE 27 UNITS

EHS 201 [1,2] Plant Identification and Usage ............................................ 3
EHS 210 [1] Introduction to Environmental Horticulture .......................... 3
EHS 212 [2,3,4] Floriculture Crop Production ............................................. 3
EHS 280 [1] Beginning Floral Design .......................................................... 3
EHS 281 [2,3,4] Advanced Floral Design .................................................... 3
EHS 282 [3,4] Floral Shop Management ....................................................... 4
EHS 383 [1,2] Commercial Floristry Production ........................................ 4
SPCOM 102 [1] Introduction to Human Communication ........................... 3
BUSAD 259 [NP] Small Business Management ......................................... 3
PLSC 255 [NP] Plant Pest Control ............................................................... 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................................... 41

**Required
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**

**EXPECTED STUDENT LEARNING OUTCOMES**

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Crop Science will be able to:

1. Demonstrate proficiency in agricultural sciences/engineering by employing the scientific method to solve agricultural problems.
2. Be able to employ safe work habits as prescribed in the “Injury, Illness Prevention” (IIPP) for the workplace employed, including but not limited to handling and storage of hazardous materials.
3. Demonstrate mastery of the technical and soft skills needed for successful employment in Crop Science (Agronomy, Pomology, Viticulture, and enology, or oleiculture.)
4. Apply the principles of ecology, soil science, and plant science to crop management problems.
5. Develop integrated pest management programs for specific crops.

**MAJOR REQUIREMENTS**

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS**

<table>
<thead>
<tr>
<th>Course Code</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 SCIENCE BREADTH CORE - COMPLETE 9 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 200</td>
<td>Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>Soils</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>Introductions to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGERC 225</td>
<td>Agriculture Computer Applications</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGERC 210</td>
<td>Elements of Agriculture Economics</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGERC 200</td>
<td>Agriculture Accounting and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

**III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 200</td>
<td>Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 205</td>
<td>Field Crops</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 215</td>
<td>Vegetable Crops</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>Plant Nutrition &amp; Fertilizers</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 255</td>
<td>Plant Pest Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS**

<table>
<thead>
<tr>
<th>Course Code</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>AGM 220</td>
<td>Farm Machinery</td>
<td>3</td>
</tr>
<tr>
<td>AGM 235</td>
<td>Irrigation and Drainage</td>
<td>3</td>
</tr>
<tr>
<td>PLSC 260</td>
<td>Plant Disease Control</td>
<td>3</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.S. MAJOR** .................................................. 30

**Dairy Industry Technician**

This program will develop skills and knowledge to work in the dairy industry or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

**Certificate of Achievement: Dairy Industry Technician**

**EXPECTED STUDENT LEARNING OUTCOMES**

Students who earn a Certificate of Achievement in Dairy Industry Technician will be able to:

1. Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.
2. Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
4. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.

**CERTIFICATE REQUIREMENTS**

To earn a Certificate of Achievement 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 Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 349B</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 Code</th>
<th>Title</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>
<tr>
<td>DAIND 304</td>
<td>Sensory Evaluation &amp; Grading</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 305</td>
<td>HACCP and Food Safety</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 306</td>
<td>Dairy Industry Employability Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 307</td>
<td>Process Equipment &amp; Engineering</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 308</td>
<td>Laboratory Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 309</td>
<td>Dairy Products &amp; Marketing</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 310</td>
<td>Transportation of Dairy Products</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 311</td>
<td>Cheese and Whey Processing</td>
<td>1</td>
</tr>
<tr>
<td>DAIND 312</td>
<td>Warehousing/Dry &amp; Refrigerated</td>
<td>1</td>
</tr>
</tbody>
</table>

**III. AGRICULTURE MAJOR ELECTIVE UNITS - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGERC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 17
A.S. Degree: Dairy Industry

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Dairy Industry will be able to:

1. Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.
2. Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
4. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.

MAJOR REQUIREMENTS
To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

I. AGRICULTURE CAREER COURSES - 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 349 A-D</td>
<td>Work Experience</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>Title</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 OR</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>Elements of Agriculture Economics</td>
<td>3 OR</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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAIN 301</td>
<td>Good Manufacturing Practices and Sanitation</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 302</td>
<td>Fluid Stream</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 303</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 304</td>
<td>Sensory Evaluation &amp; Grading</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 305</td>
<td>Food Safety/HACCP</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 306</td>
<td>Dairy Industry Employability Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 307</td>
<td>Process Equipment &amp; Engineering</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 308</td>
<td>Laboratory Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 309</td>
<td>Dairy Products &amp; Marketing</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 310</td>
<td>Transportation of Dairy Products</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 311</td>
<td>Cheese and Whey Processing</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 312</td>
<td>Warehousing/Dry &amp; Refrigerated</td>
<td>1</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 4 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 222</td>
<td>Milk Production &amp; Technology</td>
<td>3</td>
</tr>
<tr>
<td>and any other Agriculture course approved by major advisor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR ................................................................. 30

**Required

Dairy Science PROGRAM

A.S. Degree: Dairy Science

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Dairy Science will be able to:

1. Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.
2. Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
4. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.

MAJOR REQUIREMENTS
To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

I. AGRICULTURE CAREER COURSES - 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 349 A-D</td>
<td>Work Experience</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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 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 OR</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>Elements of Agriculture Economics</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>Agriculture Accounting &amp; Analysis</td>
<td>3</td>
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</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAIN 301</td>
<td>Good Manufacturing Practices and Sanitation</td>
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<td>DAIN 302</td>
<td>Fluid Stream</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 303</td>
<td>Industrial Safety</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 304</td>
<td>Sensory Evaluation &amp; Grading</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 305</td>
<td>Food Safety/HACCP</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 306</td>
<td>Dairy Industry Employability Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 307</td>
<td>Process Equipment &amp; Engineering</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 308</td>
<td>Laboratory Skills</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 309</td>
<td>Dairy Products &amp; Marketing</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 310</td>
<td>Transportation of Dairy Products</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 311</td>
<td>Cheese and Whey Processing</td>
<td>1</td>
</tr>
<tr>
<td>DAIN 312</td>
<td>Warehousing/Dry &amp; Refrigerated</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>ANSC 220</td>
<td>Dairy Industry/Dairy Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 221</td>
<td>Dairy Cattle Selection &amp; Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 224</td>
<td>Dairy Feed &amp; Feeding</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 226</td>
<td>Dairy Breeding &amp; Selection</td>
<td>3</td>
</tr>
</tbody>
</table>

ANY 200 SERIES AGRICULTURE COURSE NOT TAKEN ABOVE
1 UNIT MAXIMUM FROM ANY 300 SERIES AGRICULTURE COURSE .................................. 1

MINIMUM UNITS IN A.S. MAJOR ................................................................. 30

**Required
A.S. Degree: Environmental Horticultural Science

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate's Degree in Environmental Horticulture Science will be able to:

1. List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.
2. Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.
3. Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.
4. Demonstrate good work habits and inter-personal communication skills that employers demand.

MAJOR REQUIREMENTS

To earn an Associate Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

I. AGRICULTURE CAREER CORE – COMPLETE 5 UNITS

- AG 115
- AG 349A-0 ** [NP] Work Experience (total of 4 units) **
- AG 249 ** [NP] Agriculture Internship **

II. AGRICULTURE SCIENCE BREADTH CORE – COMPLETE 6 UNITS

- ANSC 200
- NR 200
- AGM 200
- AGEC 225
- AGEC 210
- AGEC 200

III. AGRICULTURE MAJOR COURSES – COMPLETE 12 UNITS

- PLSC 200
- EHS 201
- EHS 202
- EHS 210

IV. AGRICULTURE MAJOR ELECTIVES – COMPLETE 7 UNITS

- AGM 212
- EHS 215
- EHS 220
- EHS 235
- EHS 250
- EHS 276
- EHS 278
- EHS 280
- EHS 281
- NR 222
- PLSC 250
- PLSC 255
- PLSC 260

MINIMUM UNITS IN A.S. MAJOR ................................................................. 30

**Required

Certificate of Achievement: Food 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.

I. AGRICULTURE CAREER COURSES – COMPLETE 5 UNITS

- AG 115
- AG 349A-0 ** [NP] Work Experience **
- AG 249 ** [NP] Agriculture Internship **

II. AGRICULTURE SCIENCE COURSES – COMPLETE 9 UNITS

- ANSC 200
- NR 200
- AGM 200
- AGEC 225
- AGEC 210
- AGEC 200

III. AGRICULTURE MAJOR COURSES – COMPLETE 15 UNITS AS SPECIFIED.

- FDP 200
- AG 376
- AG 280

AND Complete a minimum of 6 units from the list below

- FDP 300
- FDP 301
- FDP 342
- FDP 376
- FDP 378
- FDP 379
- FDP 380
- FDP 381
- FDP 382
- FDP 383
- FDP 386
- FDP 387

IV. AGRICULTURE MAJOR ELECITVES – COMPLETE 6 UNITS

- AG 285
- MICRO 101
- ANSC 316

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. To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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>4 OR</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>

* 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>FDP 200</td>
<td>3</td>
<td>Introduction to Plant Science</td>
</tr>
<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 OR</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3 OR</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 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 376</td>
<td>3</td>
<td>Basic Science and Laboratory Techniques</td>
</tr>
<tr>
<td>FDP 300</td>
<td>1.5</td>
<td>Certified Professional Food Manager Training</td>
</tr>
<tr>
<td>FDP 301</td>
<td>1.5</td>
<td>Certified HACCP Manager Training</td>
</tr>
<tr>
<td>FDP 376</td>
<td>1.5</td>
<td>Basic Food Plant Laboratory Procedures</td>
</tr>
<tr>
<td>FDP 378</td>
<td>1</td>
<td>Food Laboratory Instruments</td>
</tr>
<tr>
<td>FDP 379</td>
<td>1</td>
<td>Food Products Grading</td>
</tr>
<tr>
<td>FDP 380</td>
<td>1</td>
<td>Food Products Microanalysis-A</td>
</tr>
<tr>
<td>FDP 381</td>
<td>1</td>
<td>Food Products Microanalysis-B Mold Counting</td>
</tr>
<tr>
<td>FDP 382</td>
<td>1</td>
<td>Food Products Microanalysis-C</td>
</tr>
<tr>
<td>FDP 383</td>
<td>1</td>
<td>Enzymes in the Food Industry</td>
</tr>
<tr>
<td>FDP 386</td>
<td>1</td>
<td>Food Laboratory Chemistry Procedures</td>
</tr>
<tr>
<td>FDP 387</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**</td>
<td>3</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>AG 285</td>
<td>3</td>
<td>Agricultural Communications</td>
</tr>
<tr>
<td>MCR101</td>
<td>4</td>
<td>Microbiology</td>
</tr>
<tr>
<td>ANSC 316</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.

MINIMUM UNITS IN A.S. MAJOR 30

**Recommended
*** Required
*** or higher math strongly recommended

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, firefighting, 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 Technician

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Forestry will be able to:

1. Employ the scientific method to solve problems in the laboratory and in the natural environment.
2. Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment.
3. Demonstrate sufficient mastery of forestry and land management skills for technical employment in the natural resource management.
4. Apply the principles of ecology, soil science, silviculture, cartography, and facility maintenance and development to sustainable resources management problems.
5. Develop environmental ethics as an operational philosophy for resource management, public education of natural resources, and wildlife management.

CERTIFICATE REQUIREMENTS

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</td>
<td>4 OR</td>
<td>Work Experience (maximum completion total 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>FDP 200</td>
<td>3</td>
<td>Introduction to Plant Science</td>
</tr>
<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 OR</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3 OR</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 15 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENSCI 108</td>
<td>3</td>
<td>Environmental Conservation</td>
</tr>
<tr>
<td>NR 220</td>
<td>3</td>
<td>Introductory Forestry</td>
</tr>
<tr>
<td>NR 222</td>
<td>3</td>
<td>Native Tree &amp; Shrub Identification</td>
</tr>
<tr>
<td>NR 224</td>
<td>3</td>
<td>Intro to Forestry Measurement</td>
</tr>
<tr>
<td>NR 376</td>
<td>3</td>
<td>Forestry Technology</td>
</tr>
<tr>
<td>NR 379</td>
<td>3</td>
<td>Wildland Fire Control</td>
</tr>
<tr>
<td>ENSCI 109</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 or Plant Science courses not listed or used above 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280</td>
<td>3</td>
<td>Agricultural Computations</td>
</tr>
<tr>
<td>AGM 230</td>
<td>3</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>
<tr>
<td>EHS 276</td>
<td>3</td>
<td>Landscape Maintenance</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT 35

** Required
A.S. Degree: Forestry

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Forestry will be able to:

1. Employ the scientific method to solve problems in the laboratory and in the natural environment.
2. Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment.
3. Demonstrate sufficient mastery of forestry and land management skills for technical employment in the natural resource management.
4. Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resource management problems.
5. Develop environmental ethics as an operational philosophy for resource management, public education of natural resources, and wildlife management.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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 349A-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>PLSC 200</td>
<td>3</td>
<td>Introduction to Plant Science</td>
</tr>
<tr>
<td>NR 200</td>
<td>3</td>
<td>Soils</td>
</tr>
<tr>
<td>AGM 200</td>
<td>4</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>AGECD 225</td>
<td>[NP]</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGECD 210</td>
<td>[NP]</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGECD 200</td>
<td>3</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>3</td>
<td>Introduction to Forestry</td>
</tr>
<tr>
<td>NR 222</td>
<td>3</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 Geographic 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

Any Natural Resources, Agriculture Economics on Plant Science course not listed or used above... 3

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

---

A.S. Degree: Fruit Science

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Fruit Science will be able to:

1. Employ the scientific method to solve problems in the laboratory and in the field.
2. Practice safe work habits in an employment setting, including handling and storage of hazardous materials.
3. Demonstrate sufficient mastery of general plant science skills for technical employment in the plant science management industry (agronomy, pomology, viticulture and enology, or oleoculture).
4. Apply the principles of ecology, soil science, and plant science to crop management problems.
5. Develop integrated pest management programs for specific crops.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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 (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>AGECD 225</td>
<td>[NP]</td>
<td>Agriculture Computer Applications</td>
</tr>
<tr>
<td>AGECD 210</td>
<td>[NP]</td>
<td>Elements of Agriculture Economics</td>
</tr>
<tr>
<td>AGECD 200</td>
<td>3</td>
<td>Agriculture Accounting and Analysis</td>
</tr>
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</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

Complete 3 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLSC 230</td>
<td>3</td>
<td>Fruit Science</td>
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</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>AGECD 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

MINIMUM 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.

Certificate of Achievement: Heavy Machinery Management

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Heavy Machinery Management will be able to:

1. Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.
2. Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.
3. Select proper tools and equipment for various applications, staying within the desired financial restraints.
4. Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.

EXPECTED STUDENT LEARNING OUTCOMES

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. MAJOR REQUIRED COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>NP</td>
</tr>
<tr>
<td>AGM 214</td>
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<tr>
<td>AGM 215</td>
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<tr>
<td>AGEC 200</td>
<td>NP</td>
</tr>
<tr>
<td>AGEC 220</td>
<td>NP</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>NP</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .......................................... 15

Landscape and 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

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Landscape/Park Maintenance will be able to:

1. List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.
2. Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.
3. Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.
4. Demonstrate good work habits and inter-personal communication skills that employers demand.

CERTIFICATE REQUIREMENTS

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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>[1]</td>
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<tr>
<td>AG 349A-D</td>
<td>[NP]</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP]</td>
</tr>
</tbody>
</table>

II. AGRICULTURE BREADTH CORE UNITS - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>[NP]</td>
</tr>
<tr>
<td>NR 200</td>
<td>[NP]</td>
</tr>
<tr>
<td>PLSC 200</td>
<td>[1]</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>[2]</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>[NP]</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 20 UNITS

<table>
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<th>Units</th>
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</thead>
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</tr>
<tr>
<td>EHS 202</td>
<td>[1,2]</td>
</tr>
<tr>
<td>EHS 210</td>
<td>[1]</td>
</tr>
<tr>
<td>EHS 220</td>
<td>[2,3,4]</td>
</tr>
<tr>
<td>EHS 276</td>
<td>[1]</td>
</tr>
<tr>
<td>EHS 278</td>
<td>[2,3,4]</td>
</tr>
<tr>
<td>EHS 215</td>
<td>[3,4]</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280</td>
<td>[NP]</td>
</tr>
<tr>
<td>AG 285</td>
<td>[NP]</td>
</tr>
<tr>
<td>NR 222</td>
<td>[3]</td>
</tr>
<tr>
<td>AGEC 280</td>
<td>[2,3,4]</td>
</tr>
<tr>
<td>AGM 230</td>
<td>[3,4]</td>
</tr>
<tr>
<td>NR 250</td>
<td>[2,3]</td>
</tr>
<tr>
<td>EHS 250</td>
<td>[3,4]</td>
</tr>
<tr>
<td>PLSC 250</td>
<td>[3,4]</td>
</tr>
<tr>
<td>PLSC 255</td>
<td>[3,4]</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT............................................. 41

**Required
Certification of Achievement: Landscape Design

EXPECTED STUDENT LEARNING OUTCOMES
Students who earn a Certificate of Achievement in Landscape Design will be able to:

1. List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.
2. Demonstrate general horticulture practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.
3. Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.
4. Demonstrate good work habits and inter-personal communication skills that employers demand.

CERTIFICATE REQUIREMENTS
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 24 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 210</td>
<td>Introduction to CAD</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 100</td>
<td>Beginning Graphics &amp; Design 1</td>
<td>4</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>Agriculture Work Experience</td>
<td>4</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 18 UNITS

Complete 15 units from the following:

<table>
<thead>
<tr>
<th>Course Code</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>ARCH 121</td>
<td>Landscape Design</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 122</td>
<td>Architectural Design 1</td>
<td>4</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>Architecture Drafting 1</td>
<td>4</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>Basic Architectural Drafting 1</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>ARCH 106</td>
<td>Materials of Construction</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>Materials of Construction Lab</td>
<td>2</td>
</tr>
<tr>
<td>NR 222</td>
<td>Native Tree &amp; Shrub Identification</td>
<td>1</td>
</tr>
<tr>
<td>ARCH 100</td>
<td>Architectural Design 1</td>
<td>4</td>
</tr>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>ENGT 210</td>
<td>Introduction to CAD</td>
<td>1</td>
</tr>
<tr>
<td>BOT 110</td>
<td>Plant Biology</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 42

Mechanized Agriculture

CERTIFICATE REQUIREMENTS
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 Code</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 249</td>
<td>Agriculture Internship</td>
<td>4</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>Work Experience (for a total of 4 units)</td>
<td>4</td>
</tr>
</tbody>
</table>

II. REQUIRED COURSES FOR CERTIFICATE - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course Code</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 210</td>
<td>Agricultural Welding</td>
<td>3</td>
</tr>
<tr>
<td>AGM 215</td>
<td>Machinery Management</td>
<td>3</td>
</tr>
<tr>
<td>AGM 241</td>
<td>Diesel Engine Principles</td>
<td>3</td>
</tr>
<tr>
<td>AGM 262</td>
<td>Hydraulics/Pneumatics</td>
<td>3</td>
</tr>
</tbody>
</table>

III. ELECTIVE COURSES FOR CERTIFICATE - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course Code</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>Communications in Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 280</td>
<td>Agricultural Sales and Service</td>
<td>3</td>
</tr>
<tr>
<td>AGM 211</td>
<td>Advanced Agricultural Welding</td>
<td>3</td>
</tr>
<tr>
<td>AGM 214</td>
<td>Equipment Service and Safety</td>
<td>3</td>
</tr>
<tr>
<td>AGM 225</td>
<td>Principles of Electrical Wiring</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>AGM 241</td>
<td>Diesel Engine Principles</td>
<td>2</td>
</tr>
<tr>
<td>AGM 251</td>
<td>Farm Construction and Materials</td>
<td>4</td>
</tr>
<tr>
<td>AGM 252</td>
<td>Farm Construction Advanced Lab</td>
<td>2</td>
</tr>
<tr>
<td>AGM 289</td>
<td>Principles of Power Mechanics/Small Engines</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT: 30

A.S. Degree: Mechanized Agriculture

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Mechanized Agriculture will be able to:

1. Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.
2. Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.
3. Select proper tools and equipment for various applications, staying within the desired financial constraints.
4. Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.
5. Demonstrate and relate the use of skills developed across various general education disciplines (ex. English, math, physics etc.) to help solve problems within the mechanized agriculture field.
MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

I. AGRICULTURE CAREER CORE - 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 249</td>
<td>4 OR</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>4 OR</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH CORE - 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>AGEC 225</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>3</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS IN ONE OPTION

FABRICATION OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>3</td>
</tr>
<tr>
<td>AGM 210</td>
<td>3</td>
</tr>
<tr>
<td>AGM 262</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGM 280</td>
<td>3</td>
</tr>
<tr>
<td>AGM 251</td>
<td>4</td>
</tr>
</tbody>
</table>

POWER OPTION

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 200</td>
<td>3</td>
</tr>
<tr>
<td>AGM 210</td>
<td>3</td>
</tr>
<tr>
<td>AGM 215</td>
<td>3</td>
</tr>
<tr>
<td>AGM 240</td>
<td>3</td>
</tr>
<tr>
<td>AGM 262</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGM 280</td>
<td>3</td>
</tr>
</tbody>
</table>

COMPLETE 5 UNITS

COMPLETE 12 UNITS IN ONE OPTION

COMPLETE 4-5 UNITS

IV. AGRICULTURE ELECTIVE COURSES—COMPLETE 4-5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 211</td>
<td>3</td>
</tr>
<tr>
<td>AGM 214</td>
<td>2</td>
</tr>
<tr>
<td>AGM 225</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>2</td>
</tr>
<tr>
<td>AGM 241</td>
<td>3</td>
</tr>
<tr>
<td>AGM 252</td>
<td>2</td>
</tr>
<tr>
<td>AGM 289</td>
<td>3</td>
</tr>
</tbody>
</table>

ANY 200 LEVEL AGRICULTURE COURSE INCLUDING THOSE THAT ARE LISTED, BUT NOT USED, IN AREA II ABOVE.

COMPLETE 9 UNITS

COMPLETE 21 UNITS

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT…………………………….. 41

**Required

---

Nursery Production PROGRAM

In this program, the student will develop skills relating to plant identification, propagation and growing for sale, operations and maintenance of plant nursery equipment and structures. Contact the division office in the Agriculture Building for advising assistance.

Certificate of Achievement:
Nursery Production

EXPECTED STUDENT LEARNING OUTCOMES

Students who earn a Certificate of Achievement in Nursery Production will be able to:

1. List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.
2. Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.
3. Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.
4. Demonstrate good work habits and interpersonal communication skills that employers demand.

CERTIFICATE REQUIREMENTS

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>
</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>3 OR</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH CORE - 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>AGEC 225</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGEC 200</td>
<td>3</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 21 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 280</td>
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</tr>
<tr>
<td>AG 285</td>
<td>3</td>
</tr>
<tr>
<td>EHS 210</td>
<td>3</td>
</tr>
<tr>
<td>EHS 201</td>
<td>3</td>
</tr>
<tr>
<td>EHS 202</td>
<td>3</td>
</tr>
<tr>
<td>EHS 215</td>
<td>3</td>
</tr>
<tr>
<td>EHS 220</td>
<td>2</td>
</tr>
<tr>
<td>EHS 235</td>
<td>3</td>
</tr>
<tr>
<td>NR 222</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

Any course in Plant Science, Agriculture Economics, or Agricultural Economics ……………… 3

**Required
A.S. Degree: Poultry Science

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate's Degree in Poultry Science will be able to:

1. Demonstrate proficiency in agricultural sciences/engineering by employing the scientific method to solve agricultural problems.
2. Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Demonstrate proficiency in agricultural sciences/engineering by employing the scientific method to solve agricultural problems.
4. Employ safe work habits as prescribed in the “Injury, Illness Prevention Plan” (IIPP) for the program area completed.

MAJOR REQUIREMENTS
To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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 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
   AGM 200 [NP] Introduction to Mechanical Technology ......................... 3
   AGE 225 [NP] Agriculture Computer Applications ............................. 3 OR
   AGE 210 [NP] Elements of Agriculture Economics ............................ 3 OR
   AGE 200 [2,3,4] Agriculture Accounting and Analysis ......................... 3

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS
   ANSC 230 [1] Poultry Science ................................................................. 3
   ANSC 214 [NP] Livestock Feeding and Nutrition .................................. 3 OR
   ANSC 234 [NP] Poultry Feeding ............................................................. 3 OR
   ANSC 235 [2] Poultry Diseases & Housing ......................................... 3 OR
   AGE 222 [NP] Avian Practices ............................................................... 3
   ANSC 236 [2] Poultry Breeding and Selection ..................................... 3

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

MINIMUM UNITS IN A.S. MAJOR .................................................. 30

**Required
A.S. Degree: Recreational Land Management

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Recreational Land Management will be able to:

1. Employ the scientific method to solve problems in the laboratory and in the natural environment.
2. Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment.
3. Demonstrate sufficient mastery of forestry and land management skills for technical employment in the natural resource management.
4. Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resources management problems.
5. Develop environmental ethics as an operational philosophy for resource management, public education of natural resources, and wildlife management.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

I. AGRICULTURE CAREER REQUIRED - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>[1] Introduction to Agricultural Education and Careers</td>
<td>1</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP] Agriculture Work Experience (total of 4 units)**</td>
<td>4 OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP] Agriculture Internship**</td>
<td>4</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH REQUIRED - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 200</td>
<td>[1,2] Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>NR 200</td>
<td>[1,2] Soils</td>
<td>4</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[NP] Introduction to Mechanical Technology</td>
<td>3</td>
</tr>
<tr>
<td>AGE 225</td>
<td>[NP] Agriculture Computer Applications</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGE 210</td>
<td>[NP] Elements of Agricultural Economics</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGE 200</td>
<td>[NP] Agricultural Accounting and Analysis</td>
<td>3</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR REQUIRED - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 222</td>
<td>[2,3] Native Tree &amp; Shrub Identification</td>
<td>3</td>
</tr>
<tr>
<td>NR 220</td>
<td>[1] Introduction to Forestry</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVE - COMPLETE 7 UNITS

Any Natural Resources course not listed or used above: 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHS 276</td>
<td>[2] Landscape Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>AG 280</td>
<td>[NP] Agriculture Communications</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>[NP] Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>AG 285</td>
<td>[NP] Agricultural Communications</td>
<td>3</td>
</tr>
<tr>
<td>AGM 215</td>
<td>[NP] Machinery Management</td>
<td>2</td>
</tr>
<tr>
<td>HE 100</td>
<td>[4] Standard First Aid/CPR</td>
<td>1</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR .......................................................... 30

**Required

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A.S. Degree: Soil Science

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Soil Science will be able to:

1. Employ the scientific method to solve problems in the laboratory and in the natural environment.
2. Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment.
3. Demonstrate sufficient mastery of forestry and land management skills for technical employment in the natural resource management.
4. Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resources management problems.
5. Develop environmental ethics as an operational philosophy for resource management, public education of natural resources, and wildlife management.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

I. AGRICULTURE CAREER CORE - COMPLETE 5 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 115</td>
<td>[1] Introduction to Agricultural Education and Careers</td>
<td>1</td>
</tr>
<tr>
<td>AG 349A-D</td>
<td>[NP] Agriculture Work Experience (total of 4 units)**</td>
<td>4 OR</td>
</tr>
<tr>
<td>AG 249</td>
<td>[NP] Agriculture Internship**</td>
<td>4</td>
</tr>
</tbody>
</table>

II. AGRICULTURE SCIENCE BREADTH CORE - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS 200</td>
<td>[1,2] Introduction to Plant Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>[1,2] Introduction to Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>AGM 200</td>
<td>[1,2] Introduction to Mechanical Technology</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGE 200</td>
<td>[3,4] Agriculture Accounting and Analysis</td>
<td>3 OR</td>
</tr>
<tr>
<td>AGE 210</td>
<td>[3,4] Elements of Agricultural Economics</td>
<td>3 OR</td>
</tr>
</tbody>
</table>

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

Complete 4 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 200</td>
<td>[1,2] Soils</td>
<td>4</td>
</tr>
</tbody>
</table>

Complete 5 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM 255</td>
<td>[3,4] Irrigation &amp; Drainage</td>
<td>3</td>
</tr>
<tr>
<td>PLS 250</td>
<td>[3,4] Plant Nutrition &amp; Fertilizers</td>
<td>3</td>
</tr>
<tr>
<td>PLS 250</td>
<td>[1,2] Fruit Science</td>
<td>3</td>
</tr>
<tr>
<td>PLS 205</td>
<td>[1,2] Field Crops</td>
<td>3</td>
</tr>
<tr>
<td>NR 220</td>
<td>[3,4] Introductory Forestry</td>
<td>3</td>
</tr>
<tr>
<td>PLS 241</td>
<td>[3,4] Viticulture</td>
<td>3</td>
</tr>
</tbody>
</table>

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR 222</td>
<td>[1,2] Native Tree &amp; Shrub Identification</td>
<td>3</td>
</tr>
<tr>
<td>NR 224</td>
<td>[3,4] Introduction to Forestry Measurement</td>
<td>3</td>
</tr>
<tr>
<td>EHS 210</td>
<td>[1,2] Introduction to Environmental Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>PLS 255</td>
<td>[3,4] Plant Pest Control</td>
<td>3</td>
</tr>
<tr>
<td>AGM 230</td>
<td>[1,2] Field Surveying</td>
<td>2</td>
</tr>
<tr>
<td>PLS 260</td>
<td>[3,4] Plant Disease Control</td>
<td>3</td>
</tr>
<tr>
<td>AGGE 146</td>
<td>[3,4] Agriculture, Environment &amp; Society</td>
<td>3</td>
</tr>
</tbody>
</table>

Any course not already taken in Area III. above

MINIMUM UNITS IN A.S. MAJOR .......................................................... 30

**Required
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

EXPECTED STUDENT LEARNING OUTCOMES
Students who earn a Certificate of Achievement in Veterinary Technician will be able to:

1. Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.
2. Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.
3. Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.
4. Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.

CERTIFICATE REQUIREMENTS
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 Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 250</td>
<td>Veterinary Physiology, Anatomy, and Terminology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 251</td>
<td>Veterinary Pharmacy Procedures</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 252</td>
<td>Veterinary Equipment: Operation Instrumentation and Safety</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 253</td>
<td>Veterinary Laboratory Procedures</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 254</td>
<td>Veterinary Medical Office Procedures</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 255</td>
<td>Preparation for Surgical and Dental Assistance</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 256</td>
<td>Veterinary Assistance and Nursing: Emergency Procedures</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 257</td>
<td>Veterinary Assistance &amp; Nursing: Animal Handling</td>
<td>2</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – (NOT REQUIRED FOR CERTIFICATE)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 111</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>ANSC 15</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 200</td>
<td>Intro to Animal Science (Large animal oriented)</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 215</td>
<td>Animal Health &amp; Sanitation (Large animal oriented)</td>
<td>3</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

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 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 $1,600 per semester, which includes enrollment and materials fees, health clearance, uniforms, books, and licensure and examinations. If you would like information on Financial Aid, call (209) 575-7700.

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.

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 weighted lottery system will be employed. An applicant’s name will be entered an extra time for:

- **ENGLISH** – Satisfactory completion of ENGL 50 or ENGL 101
- **PSYCHOLOGY** – Satisfactory completion of PSYCH 51 or PSYCH 101
- **PREVIOUSLY QUALIFIED APPLICANT** - Each previously qualified application to the MJC Dental Assisting Program.

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

CPR certification from the American Heart Association or the Red Cross only, for infant, child, and adult; eligible for recertification; and current throughout the program. Information on providers will be included on the acceptance letter.

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 Licensure/Certification

The Dental Board of California and the Dental Assisting National Board reserves the right to deny application of license/certification for specific crimes and/or actions. Anyone considering a career in dental assisting, who might be denied licensure/certification, is advised to discuss this issue with the respective Boards prior to entering the Dental Assisting Program.

Dental Assisting Curriculum

- Students are also 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)**

| Course | Title | Units
|--------|-------|------
| ENGL 50 | Basic Composition and Reading | 5
| ENGL 101 | Composition and Reading | 3
| PSYCH 51 | Psychology in Everyday Life | 3
| PSYCH 101 | General Psychology | 3

**REQUIRED COURSES (DENTAL ASSISTING)**

| Course | Title | Units
|--------|-------|------
| DIAST 360 | Introduction to Dental Assisting | 3
| DIAST 361 | Prevention of Disease Transmission | 2
| DIAST 362 | Dental Science | 3
| DIAST 363 | Introduction to Clinical Dentistry | 2
| DIAST 364 | Dental Materials | 2
| DIAST 365 | Theory of Dental Radiology | 3
| DIAST 366 | Administrative Dental Assisting | 2
| DIAST 367 | Expanded Functions | 2
| DIAST 368 | Advanced Dental Assisting | 3
| DIAST 369 | Clinical Dental Radiology | 3
| DIAT 370 | Clinical 1 | 6
| DIAT 371 | Clinical 2 | 1
| DIAT 372 | Pit and Fissure Sealants | 3½

**MINIMUM UNITS REQUIRED FOR CERTIFICATE** ........................................ 38½

A.S. Degree: Dental Assisting

To earn an Associate in Science Degree, the student must complete the requirements detailed in the Career Technical Education Pathway*. Consult an advisor for selection of courses.

**MINIMUM UNITS REQUIRED IN A.S. DEGREE** ....................................... 60

*The Health Education requirement has been waived for all Allied Health certificates and degrees.

Medical Assisting PROGRAM

The Modesto Junior College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

**Commission on Accreditation of Allied Health Education Programs**

1361 Park Street
Clearwater, FL 33756
(727) 210-2350

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 $2,300 includes a $25/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, certificated 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. If you have questions about program information, call Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/allied health and search Medical Assisting Programs. 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>WRITING COMPETENCY</th>
<th>ENGL 49 (NP)</th>
<th>Basic Composition and Reading (C or better) …………………………………. 5 OR Eligibility for ENGL 50 on assessment test</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH COMPETENCY</td>
<td>MATH 20 (NP)</td>
<td>Pre-algebra (C or better) …………………………………. 4 OR Eligibility for MATH 70 on assessment test</td>
</tr>
</tbody>
</table>
| READING COMPETENCY  | READ 184 (NP) | Critical Reading (C or better) …………………………………. 5 OR Reading competency (65) on Accuplacer 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 weighted lottery system will be employed. An applicant’s name will be entered an extra time for:

- **ANATOMY AND PHYSIOLOGY** – Satisfactory completion of AP 50
- **PSYCHOLOGY** – Satisfactory completion of PSYCH 51 OR PSYCH 101

Additional Requirements

**For Accepted Applicants Only**

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Clearance</strong></td>
</tr>
<tr>
<td>• 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 sell, employees, or patients.</td>
</tr>
<tr>
<td>• Documentation of required immunizations.</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
</tbody>
</table>

**Criminal Background Check**

Some externship sites will 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 will 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) Certifying 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.mifl.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</th>
<th>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>SPOCDM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPOCDM 102</td>
<td>Introduction to Human Communication</td>
<td>3 OR</td>
</tr>
<tr>
<td>SPOCDM 130</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

REQUIRED COURSES (MEDICAL ASSISTING)

[FALL SEMESTER]

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>MDAST 323</td>
<td>Medical Assisting Clinical Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

[SPRING SEMESTER]

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDAST 324</td>
<td>Introduction to Diseases and Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>MDAST 325</td>
<td>Laboratory Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MDAST 326</td>
<td>Externship</td>
<td>7</td>
</tr>
</tbody>
</table>

MINIMUM UNITS REQUIRED IN CERTIFICATE .............................................. 35½

A.S. Degree: Medical Assisting

To earn an Associate in Science Degree in Medical Assisting, the student must complete the requirements detailed in the Career Technical Education Pathway*. Consult an advisor for selection of courses.

MINIMUM UNITS REQUIRED IN A.S. DEGREE ............................................ 60

*The Health Education requirement has been waived for all Allied Health certificates and degrees.

Nursing: Associate Degree Nursing (RN) PROGRAM

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 $2,500, and $2,000 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.

If you would like information on Financial Aid, call 575-7700. If you would like more information about the program and the application process, please enroll in NURSE 115: Introduction to Nursing Majors. If you have questions about program information, call Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Associate Degree Nursing (ADN) Program. If you are just beginning your preparation for the nursing program and need academic advising, contact the Counseling Center (209) 575-6680.

Eligibility and Preparation for the Associate Degree 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 Allied Health office prior to the program application deadline, unless they are already in the MJC Records Office. We will accept hand-carried transcripts that are in a sealed envelope with a school seal.

Required Math Competency for Acceptance into the ADN Program

- 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 an equivalent course from another institution with a grade of C or higher.

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, PHYSO 101, and MICRO 101.)

<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 Human Physiology</td>
<td>5</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Composition and Reading</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Application

Applications are accepted for the ADN Program once per year. The annual application period is May 1 through May 31. Students are selected from the annual applicant pool for fall and spring semesters of that academic year. Applications are available from the Allied Health office and website during the May application period only. Applications may be submitted in person or mailed but must be received in the Allied Health office or postmarked by the application deadline. If you are interested in the MJC ADN transfer policy go to www.mjc.edu/alliedhealth.

Selection Process

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: 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.
- Core Biology GPA: (ANAT 125, PHYSO 101, and MICRO 101) will be used. 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, the student initially received a “C” or higher, the highest grade will be used to calculate the core biology GPA.
- Core Biology Repeated: 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 more than six years old.

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, and a predetermined cut score 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.

Additional Requirements For Conditionally Accepted Applicants Only

Conditionally accepted applicants will receive information regarding health clearance and the criminal background check, CPR certification, drug screen and the Test of Essential Academic Skills (TEAS).

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.

Nursing Assessment/Readiness Test

Conditionally accepted 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.attesting.com. Conditionally accepted applicants will be provided with detailed information on scheduling of the TEAS. A predetermined cut score must be achieved on the TEAS.

Scholastic Requirements

Continuation in the ADN Program is dependent upon completion of all 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 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. Google “Board of Registered Nursing/Licensees/License Discipline and Convictions.”

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. To graduate from the MJC ADN program, a student must: 1) complete all ADN program requirements, 2) complete the 4th semester of the MJC ADN program, and 3) complete 12 units “in residence” at MJC.

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Nursing will be able to:

1. Provide competent nursing care based on scientific principles, the Roy Adaptation Model, and the nursing process, reflecting an ethic of caring evidenced by respect for patients and families, self, colleagues, and the profession.
2. Identify a nursing diagnosis following assessment of the patient’s physical condition and behavior, an analysis of information obtained from the patient and others, including members of the health care team.
3. Formulate a care plan, in collaboration with the patient, that ensures direct and indirect nursing care services that provide for the following patient needs: safety, comfort, hygiene, protection, disease prevention, and restorative measures.
4. As provider and manager of care, establish priorities, perform the skills required to carry out nursing interventions, explain the plan of care to the patient and family, and teach the patient and family how to care for identified health problems and needs.
5. Manage and prioritize care for groups of patients; delegate tasks to subordinates based on the legal scope of practice of the subordinates and on the preparation and competence needed for the tasks to be delegated; and effectively supervise the nursing care provided by subordinates.
6. Evaluate the effectiveness of the care plan through observation of the patient’s condition and behavior, signs and symptoms of illness, reactions to treatment, and thorough communication with the patient and the health care team, and modify the plan as needed.
7. Advocate for the rights of patients by initiating actions to improve health care, facilitate changes in decisions or activities that conflict with patients’ self-determination, and provide patients the opportunity to make informed decisions about their health care.
8. Recognize that each person is a unique individual with biological, psychological, social, and spiritual needs; understand how a person’s self-concept, role function, and interdependence are affected by the values, attitudes, life experiences, culture, ethnicity, and support systems of each person.

Associate Degree Nursing Program Curriculum (for RN)

<table>
<thead>
<tr>
<th>REQUIRED COURSES (NON-NURSING)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 101 General Psychology ............................................. 3</td>
</tr>
<tr>
<td>ANTHR 102 Cultural Anthropology ........................................... 3 OR</td>
</tr>
<tr>
<td>SOCID 101 Introduction to Sociology .......................................... 3 OR</td>
</tr>
<tr>
<td>SOCID 125 Sociology of the Family ............................................ 3 OR</td>
</tr>
<tr>
<td>SOCID 150 Ethnicity and Culture in America ................................ 3 OR</td>
</tr>
<tr>
<td>SOCID 154 African-American Cultures and Communities ................. 3 OR</td>
</tr>
<tr>
<td>SOCID 156 Mexican Culture in the United States .......................... 3</td>
</tr>
<tr>
<td>SFCOM 100 Fundamentals of Public Speaking ................................. 3 OR</td>
</tr>
<tr>
<td>SFCOM 102 Introduction to Human Communication ........................ 3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>REQUIRED COURSES (NURSING)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[FIRST SEMESTER]</td>
</tr>
<tr>
<td>NURSE 260 Nursing Process: Pharmacology .................................. 2</td>
</tr>
<tr>
<td>NURSE 261 Nursing Process: Fundamentals .................................... 8</td>
</tr>
<tr>
<td>[SECOND SEMESTER]</td>
</tr>
<tr>
<td>NURSE 262 Nursing Process: Skills ........................................... ½</td>
</tr>
<tr>
<td>NURSE 263 Nursing Process: Maternity ......................................... 4</td>
</tr>
<tr>
<td>NURSE 264 Nursing Process: Pediatrics ........................................ 4½</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 requirements detailed in the Career Technical Education Pathway* (p. 67) or the University Pathway* (p. 65) in addition to the Nursing/RN coursework. Consult with an advisor for selection of courses.

*N The Health Education requirement has been waived for all Allied Health certificates and degrees.

**Pathway Application**

Applications are accepted for the LVN to ADN Advanced Placement Pathway twice per year. The biannual application periods are May 1 through May 31 and September 1 through September 30. Students are selected from the applicant pool of fall and spring semesters of the academic year by the California Board of Registered Nursing. Applications are available from the Allied Health office and website during the application period. Applications may be submitted in person or mailed but must be received in the Allied Health office or postmarked by the application deadline.

**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 formula 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 transferable lower division English courses are included in calculating this GPA.
- Core Biology GPA: (ANAT 125, PHYSIO 101, MICRO 101)
**Programs in Allied Health**

- The highest grade for the core biology courses (ANAT 125, PHYSIO 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 better, the highest grade will be used to calculate the core biology GPA.

- **Core Biology Repetitions**: 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 more than six years old.

**Additional Requirements for Conditionally Accepted Applicants only**

Conditionally accepted applicants will receive information regarding health clearance and the criminal background check, CPR certification, drug screen and the Test of Essential Academic Skills (TEAS).

**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.

**Nursing Assessment/Readiness Test**

Conditionally accepted 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](http://www.atitesting.com). Conditionally accepted pathway applicants will be provided with detailed information on scheduling of the TEAS. A predetermined cut score must be achieved on the TEAS.

**Written And Skills Proficiency Testing**
In selected cases, both written and skills proficiency testing may be required.

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**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. [Google “Board of Registered Nursing/Licensees/License Discipline and Convictions”](https://www.barncalifornia.org/sb/)..

**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. To graduate from the MJC ADN program, a student must: 1) complete all ADN program requirements; 2) complete the 4th semester of the MJC ADN program; and 3) complete 12 units “in residence” at MJC.

**A.S Degree: LVN to ADN Advanced Placement Pathway**

**Required Coursework**

**REQUIRED COURSES (NURSING)**

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<tr>
<th></th>
<th>[First Semester]</th>
<th>[Second Semester]</th>
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</thead>
<tbody>
<tr>
<td>NURSE 265</td>
<td>Nursing Process: Medical-Surgical</td>
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<tr>
<td>NURSE 266</td>
<td>Nursing Process: Mental Health</td>
<td>4</td>
</tr>
<tr>
<td>NURSE 267</td>
<td>Nursing Process: Advanced Medical-Surgical</td>
<td>11</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 requirements detailed in the Career Technical Pathway* (p. 67) or the University Preparation Pathway* (p. 65) in addition to the Nursing/LVN to ADN Advanced Placement Pathway coursework. Consult with an advisor for selection of courses.

*The Health Education requirement has been waived for all Allied Health certificates and degrees.

- NURSE 115: Introduction for Nursing Majors, no longer meets the Guidance requirement, but is recommended for success. To graduate from the MJC ADN program, a student must: 1) complete all LVN to ADN Advanced Placement Pathway requirements; 2) complete the 4th semester of the MJC ADN program; and 3) complete 12 units “in residence” at MJC.

**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** 54½
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, 5 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. If you have questions about program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Nurse Assistant Program.

Eligibility And Preparation for the Nurse Assistant Program

- Admission to Modesto Junior College
- High School Graduation or Equivalent (GED or College Degree)

Although high school graduation is not required, it is recommended for success.

RECOMMENDED COMPETENCY The following competency is recommended for success in the Nurse Assistant Program.

READ 184 Critical Reading (C or better) .............................................................. 5 OR
Reading competency (85) on Accuplacer ............................................ OR
Completion of a college degree from an accredited United States college.

PROGRAM PREREQUISITES [NONE]
PROGRAM APPLICATION [NONE]

Skills Recognition Award: Nurse Assistant

REQUPTED CURRICULUM
NURSE 40 Nurse Assistant .............................................................. 5 AND
NURSK 800 Nursing Skills Development ........................................ 0
TOTAL UNITS FOR SKILLS RECOGNITION AWARD ......................... 5

Additional Requirements for Students Enrolled In NURSE 40

PLEASE NOTE: In order to complete the health clearance process in a timely manner, students who are enrolled in NURSE 40 should contact the Allied Health office and pick up a health clearance packet. It is expected that enrolled students will have already begun the health clearance process by 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 on the first day of class.

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
ARCS MS 3201
PO Box 997416
Sacramento, CA 95899-7416
(916) 327-2445
www.dhs.ca.gov/lnc

Pharmacy Technician
Contact MJC Community Education at (209) 575-6063

Phlebotomy
Contact MJC Community Education at (209) 575-6063
Respiratory Care Program

The MJC Respiratory Care Program is a two-year associate-degree program to prepare students to sit for the State Board Respiratory Care Practitioner Exam. The Respiratory Care Program of Modesto Junior College is accredited by the Commission on Accreditation for Respiratory Care (CoARC). Graduates are also eligible for both Certification and Registration administered by the National Board for Respiratory Care.

Commission on Accreditation for Respiratory Care
1248 Harwood Road
Bedford, Texas 76021-4244
(817) 283-2835
www.coarc.com

Program expenses vary for each individual. The estimated cost of the Respiratory Care Program is $750 per semester, which includes enrollment and materials fees, health clearance, uniforms, books, and licensure examination. If you would like information on financial aid, call (209) 575-7700.

The MJC Respiratory Care Program begins once a year in January. If you have questions about program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program. For academic advising, contact the Respiratory program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program. For academic advising, contact the Respiratory program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program. For academic advising, contact the Respiratory program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program. For academic advising, contact the Respiratory program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program.

Eligibility And Preparation for the Respiratory Care Program

- Admission To Modesto Junior College
- High School Graduation is highly recommended but is not required.
- Transcripts on File in the MJC Records Office. All transcripts from 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 MATH COMPETENCY FOR ACCEPTANCE INTO THE RESPIRATORY CARE PROGRAM

- 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
- Completion of MATH 90 or higher level MATH course, or an equivalent course from another institution with a grade of C or higher

Please Note: Catalog rights prior to Summer 2009, will be honored for math competency through the 2011-2012 academic year. Beginning with the 2012 Respiratory Care Program application period, all applicants will need to meet the required math competency listed above.

Program Prerequisites

CHEM 143 Introductory College Chemistry................................. 5 AND AP 150 Integrative Anatomy & Physiology (C or better)....................... 4 OR
(ANAT 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 during 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 with a grade of 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. An applicant’s name will be entered an extra time for:

- MICROBIOLOGY - Satisfactory Completion of MICRO 101
- PSYCHOLOGY - Satisfactory completion of PSYCH 101
- SCIENCE GPA - A grade point average (GPA) for chemistry, anatomy, and physiology of 3.0 or better
- DEGREE REQUIREMENTS - Completion of the MJC General Education requirements or a bachelor’s degree
- PREVIOUSLY QUALIFIED APPLICANT - Each previously qualified applicant to the MJC Respiratory Care program.

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 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 medical history 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, warning 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

Programs in Allied Health

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 Code</th>
<th>Course 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 232 Clinical 2 ........................................................................... 3½

[Spring]

- RSCR 240 Advanced Cardiopulmonary Physiology ........................... 4½
- RSCR 242 Critical Care Procedures .................................................. 4½
- RSCR 250 Clinical 3 ........................................................................... 3½

[Summer - First Session]

- RSCR 244 Neonatal-Pediatric Respiratory Care .............................. 2
- RSCR 251 Neonatal and Pediatric Clinical Practice ....................... 1½

[Summer - Second Session]

- RSCR 253 Neonatal and Pediatric Clinical Practice 2 ................. 1½

[Fall]

- RSCR 246 Current Issues in Respiratory Care ............................... 3
- RSCR 248 Self-Directed Study ........................................................... 1½
- RSCR 252 Physician Rounds for Respiratory Care ......................... 1½
- RSCR 255 Clinical 4 ........................................................................... 4½
- RSCR 257 Clinical Preceptorship ....................................................... 2½

Minimum Units Required in A.S. Degree ........................................ 51

A.S. Degree: Respiratory Care

To earn an Associate in Science Degree in Respiratory Care, the student must complete the requirements detailed in the Career Technical Education Pathway* (p. 67) or the University Preparation Pathway* (p. 65) in addition to the Respiratory Care coursework. Consult with an advisor for selection of courses.

Minimum Units Required in A.S. Degree ........................................ 72½

*The Health Education requirement has been waived for all Allied Health certificates and degrees.
Detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway new and creative ways. Art courses help students develop a capacity for visual analysis and the ability to solve problems in art and photography. The program is designed to include pre-professional and professional courses, 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**

**EXPECTED STUDENT LEARNING OUTCOMES**

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Art will be able to:

1. Demonstrate preparedness to successfully continue studies in art at an upper division level.
2. Reproduce, render, and interpret in a variety of media through observation.
3. Plan, design, and produce original works of art.
4. Make informed assessments of quality and effectiveness in works of art, including their own.
5. Identify and distinguish various historical periods of 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. 67) or the University Preparation Pathway (p. 65) 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**

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<thead>
<tr>
<th>Course</th>
<th>Designation</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 120</td>
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<tr>
<td>ART 124</td>
<td>[2]</td>
<td>3</td>
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<tr>
<td>ART 160</td>
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<tr>
<td>ART 164</td>
<td>[NP]</td>
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<tr>
<td>ART 165</td>
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**ELECTIVE COURSES - COMPLETE 11 UNITS, NO MORE THAN 1 COURSE IN EACH AREA**

**DESIGN AND DRAWING AREA**

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<thead>
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**THREE-DIMENSIONAL ART AREA**

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<td>ART 141</td>
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**PAINTING AND PRINTMAKING AREA**

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**ART HISTORY AND APPRECIATION AREA**

<table>
<thead>
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**PHOTOGRAPHY AND COMPUTER GRAPHICS AREA**

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<td>ART 170</td>
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<td>ART 181</td>
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<td>ART 182</td>
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<tr>
<td>ART 172</td>
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</tbody>
</table>
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 8 UNITS**
- ART 150 [NP] Gallery Operations & Mgmt. (twice at 3 units) ........... 6
- ART 199B [NP] Independent Study in Gallery/Museum Studies .... 2

**ELECTIVE COURSES - COMPLETE 9 UNITS AS INDICATED**

**I. ART APPRECIATION/HUMANITIES - COMPLETE 3 UNITS**
- ART 160 [NP] Appreciation of Art .............................................. 3
- ART 164 [NP] History of Art 1 ...................................................... 3
- HUMAN 101 [NP] Introduction to the Humanities ..................... 3

**II. STUDIO ART - COMPLETE 3 UNITS**
- ART 120 [NP] Basic Drawing 1 ..................................................... 3
- ART 102 [NP] Introduction to Microcomputer Graphics ......... 3

**III. ART HISTORY/HUMANITIES - COMPLETE 3 UNITS**
- ART 161 [NP] American Art ....................................................... 3
- ART 162 [NP] History of Renaissance Art ............................... 3
- ART 163 [NP] History of Modern Art ...................................... 3
- ART 165 [NP] History of Art 2 .................................................. 3
- ART 169 [NP] History of Non-West Art ................................. 3
- HUMAN 105 [NP] Early Humanistic Traditions .................... 3
- HUMAN 106 [NP] Humanities in the Modern World ............. 3
- HUMAN 110 [NP] East Meets West .......................................... 3
- CMPGR 201 [NP] Animation---A Global View of Art in Motion 3

**MINIMUM UNITS REQUIRED IN SKILLS RECOGNITION AWARD .......... 16**

**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 12 UNITS**
- RATV 142 [2] Light, Sound, Camera & Editing Workshop ............. 3
- RATV 150 [1] Introduction to The Media Arts .......................... 3
- FILM 150 [1] Film Production .................................................. 3
- FILM 151 [1] Advanced Film Production 1 ............................ 3

**ELECTIVE COURSES - COMPLETE 4 OR MORE UNITS**
- RATV 199A [NP] Film Internship .............................................. 1-2
- FILM 199A [2,3] Film Internship .............................................. 1-2
- FILM 155 [NP] The Documentary Film .................................... 3
- ENGL 109 [NP] Creative Writing: Scriptwriting ..................... 3
- ENGL 161 [NP] Film Appreciation ........................................... 4
- FILM 153 [NP] Contemporary Film ....................................... 3
- FILM 154 [1,2] Movies with a Message .................................. 3
- ENGL 161 [NP] Film Appreciation ........................................... 4
- RATV 143 [NP] Non-Linear Video Editing ............................. 3

**MINIMUM UNITS REQUIRED IN SKILLS RECOGNITION AWARD .......... 16**

**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 caliber 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**
- RATV 142 [2] Light, Sound, Camera & Editing Workshop ............. 3
- RATV 150 [1] Introduction to The Media Arts .......................... 3
- FILM 150 [1] Film Production .................................................. 3
- FILM 151 [1] Advanced Film Production 1 ............................ 3

**ELECTIVE COURSES - COMPLETE 4 OR MORE UNITS**
- RATV 199A [NP] Film Internship .............................................. 1-2
- FILM 199A [2,3] Film Internship .............................................. 1-2
- FILM 199A [2,3] Film Internship .............................................. 1-2
- RATV 142 [2] Light, Sound, Camera & Editing Workshop ............. 3
- RATV 150 [1] Introduction to The Media Arts .......................... 3
- FILM 150 [1] Film Production .................................................. 3
- FILM 151 [1] Advanced Film Production 1 ............................ 3

**MINIMUM UNITS REQUIRED IN SKILLS RECOGNITION AWARD .......... 16**

**Humanities PROGRAM**

A.A. Degree: University Preparation, Emphasis in Humanities (p. 170)
**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, 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 practical in newspaper publishing in which the reality of producing fair, accurate 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**

- RATV 150 [NP] Introduction to the Media Arts .................................................. 3
- JRNAL 100 [NP] Reporting and Writing for the Media ........................................ 3
- JRNAL 120C [NP] Multimedia New Production Staff ....................................... 3
- CGR 211 [NP] InDesign and Typography 1 .................................................. 2
- LIBR 120 [NP] Library Research on the World Wide Web ......................... 1

**ELECTIVE COURSES - COMPLETE 3 UNITS**

- RATV 138 [NP] Writing for Radio, TV and New Media .................................... 3
- CMPGR 262 [NP] Exploring the World Wide Web ......................................... 1

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................................................ 15**

**A.A. Degree: Journalism**

**STUDENT LEARNING OUTCOMES**

Upon the successful completion of the A.A. degree in journalism at Modesto Junior College, students will be able to:

1. Identify and research stories that have news value to a community and conceptualize the coverage of those stories using written, audio or visual media.
2. Conduct an interview that yields valuable information and is accurately recorded.
3. Write a news article appropriate for publication in a local newspaper or online news site applying industry standards of accuracy, fairness, style and grammar.
4. Use a computer and current industry standard software to edit, format and layout text and images for a print or online publication.
5. Discuss the constitutional principles governing the rights and responsibilities of the media in the United States, and apply these principles and related ethical considerations in the production of news content.
6. Discuss how the mass media impacts society on a local, national and global level.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 19 UNITS**

- JRNAL 100 [3] Reporting and Writing for the Media ........................................ 3
- RATV 150 [1,2] Introduction to Mass Communications ............................... 3
- FILM 154 [NP] Movies with a Message .................................................. 3
- ART 179 [NP] Typography 1 (PageMaker and Quarkxpress) ......................... 3
- RATV 138 [1,2] Writing for Radio, TV and New Media ................................. 3
- CMPGR 262 [1] Exploring the World Wide Web ......................................... 1

**ELECTIVE COURSES - COMPLETE 3 UNITS**

- CGR 224 [NP] Illustrator and Electronic Publishing ....................................... 3
- CGR 331 [3,4] Typography 2 (PageMaker and Quarkxpress) ......................... 3
- FILM 155 [NP] The Documentary Film .................................................. 3

**MINIMUM UNITS IN A.A. MAJOR ........................................................................ 22**

**Music Program**

The Music Program offers courses for students wishing to earn a minor 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, Community Orchestras, Band and String Orchestras, opera and musical theatre productions, chamber music performances, and electronic music production. 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**

**EXPECTED STUDENT LEARNING OUTCOMES**

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Music will be able to:

1. Demonstrate musical literacy by reading music notation through their instrument and/or voice.
2. Demonstrate the ability to use basic musical notation.
3. Perform and stylistically interpret music on their applied instrument/voice in an ensemble and/or in a solo setting.
4. Demonstrate an awareness of the scope, variety, structure and form of works in the canon of traditional western art 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. Students who plan to transfer to a four-year school are strongly advised to meet with a member of the music faculty.

**PROGRAM PREREQUISITES**

- MUST 101 [P] Music Fundamentals 1 .......................................................... 1 OR
- MUST 120 [P] Music Theory Review ......................................................... 1 OR

SATISFACTORY SCORE on music theory placement examination offered during the first meeting of MUST 120 and/or MUST 121. Students who do not meet entrance proficiency will be encouraged to enroll in MUST 101 or MUST 120 prior to enrollment in MUST 121.
RECOMMENDED PREREQUISITES
MUST 111 [P] Rhythmic Skills ................................................................. 1

REQUIRED COURSES IN MUSIC THEORY - COMPLETE 20 UNITS
MUST 121 [1] Music Theory 1 .................................................................. 3
MUST 131 [1] Aural Skills 1 ................................................................. 1
MUST 132 [2] Aural Skills 2 ................................................................. 1
MUST 133 [3] Aural Skills 3 ................................................................. 1
MUST 134 [4] Aural Skills 4 ................................................................. 1
MUST 130 [1234] Practica Musica (4 times at 1 unit) ...................... 4

ENSEMBLE - COMPLETE 4 UNITS
Any of the following* (repeated individually, or combined with each other to equal the required number of units - see Repeat Limitations above).
MUSE 145 [NP] Guitar Orchestra .............................................................. 1
MUSE 155 [NP] Concert Choir ................................................................. 1
MUSE 161 [NP] Community Orchestra .................................................... 1
MUSE 165 [NP] String Orchestra ............................................................. 1
MUSE 175 [NP] Symphonic Band ............................................................. 1
MUSE 185 [NP] Jazz Band ...................................................................... 1

APPLIED MUSIC - COMPLETE 4 UNITS
Complete one or more of the courses below appropriate to the student’s instrument or voice* (repeat 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 ............................................................. 2
MUSA 145 [NP] Applied Classical Guitar ................................................. 1
MUSA 153 [NP] Applied Vocal Repertoire 1 ............................................ 1
MUSA 154 [NP] Applied Vocal Repertoire 2 ............................................ 1
MUSA 163 [NP] Applied Music (Violin and Viola) ....................................... 1
MUSA 164 [NP] Applied Music (Cello and Bass) ....................................... 1
MUSA 173 [NP] Applied Music (Brass and Percussion) ......................... 1
MUSA 183 [NP] Applied Music (Woodwinds) .......................................... 1

*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 instrumentalists will enroll in Symphonic Band and/or Jazz Band and applied woodwinds or brass/percussion. Guitarists 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 ............................................................. 2

**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

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.)
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

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<tr>
<td>RATV 131</td>
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<td>RATV 132</td>
<td>Advanced Radio Production</td>
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</tr>
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<td>RATV 137</td>
<td>Radio Programming and Broadcast Announcing</td>
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<tr>
<td>RATV 138</td>
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ELECTIVE COURSES - COMPLETE 4 UNITS

Select one course from the following:

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<td>RATV 133</td>
<td>Advanced Radio Production</td>
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<tr>
<td>RATV 199 A-D</td>
<td>Radio Internship</td>
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If necessary, select one course from the following:

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<td>RATV 101</td>
<td>Voice &amp; Articulation</td>
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<td>RATV 134</td>
<td>Television Studio Production</td>
<td>3</td>
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<tr>
<td>RATV 150</td>
<td>Introduction to The Media Arts</td>
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<tr>
<td>CMPGR 287</td>
<td>Introduction to Multimedia</td>
<td>3</td>
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</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ..................................... 17

A.A. Degree: Radio Broadcasting

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Theatre will be able to:

1. Operate an audio mixing console to execute an on-air shift.
2. Use industry standards to write the following scripts: commercial, promotional and public service announcements, and newscast.
3. Use digital editing software to record, playback, edit, and process various audio material.
4. Demonstrate various vocal techniques including the proper use of inflection, articulation, diction, pronunciation, and range when producing audio elements.
5. Identify and discuss the day to day operations of a radio station including the specific roles of departments and personnel.
6. Define industry standard terminology and demonstrate its proper use.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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

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<tr>
<td>RATV 131</td>
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<tr>
<td>RATV 132</td>
<td>Advanced Radio Production</td>
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</tbody>
</table>

Recording Arts

PROGRAM

Skills Recognition Award: Recording Arts

REQUIRED COURSES - COMPLETE 11 UNITS

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<td>Recording Arts 1</td>
<td>2 OR</td>
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<tr>
<td>RATV 172</td>
<td>Recording Arts 1</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 112</td>
<td>Recording Arts 2</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 126</td>
<td>Music Production for Multimedia</td>
<td>2 OR</td>
</tr>
<tr>
<td>RATV 168</td>
<td>Music Production for Multimedia</td>
<td>2</td>
</tr>
<tr>
<td>MUSC 121</td>
<td>Introduction to the Synthesizer and MIDI</td>
<td>2</td>
</tr>
<tr>
<td>MUSG 111</td>
<td>Introduction to American Popular Music</td>
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ELECTIVE COURSES - COMPLETE 6 UNITS

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<tr>
<td>MUSC 122</td>
<td>Electronic Music 2</td>
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<td>MUST 101</td>
<td>Music Fundamentals</td>
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<tr>
<td>MUSA 121</td>
<td>Elementary Piano</td>
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</tr>
<tr>
<td>MUSG 101</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUSG 112</td>
<td>The History of the Beatles</td>
<td>3</td>
</tr>
<tr>
<td>RATV 131</td>
<td>Introduction to Radio Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 134</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ..................................... 17

Speech Communication

PROGRAM

Skills Recognition Award: Speech Communication

REQUIRED COURSES - COMPLETE 12 UNITS

ORAL COMMUNICATION AREA - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>SFCOM 100</td>
<td>Fundamentals of Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>SFCOM 102</td>
<td>Introduction to Human Communication</td>
<td>3</td>
</tr>
</tbody>
</table>
A.A. Degree: Speech Communication

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate.In Speech Communication will be able to:

1. Construct a speech outline demonstrating clarity of ideas, proper source citation, awareness of audience, and proper outlining techniques.
2. Identify and apply principles of interpersonal communication theory to build functional relationships.
3. Find, evaluate, and incorporate research materials into written and oral argumentation, as well as cite sources correctly.
4. Adequately debate others, present platform speeches, or perform works of literature in a classroom or outside venue.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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>Title</th>
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<tbody>
<tr>
<td>SPCOM 110</td>
<td>Persuasion</td>
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CRITICAL THINKING AREA - COMPLETE 3 UNITS

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<th>Course Code</th>
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<tr>
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<td>Argumentation</td>
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</tr>
<tr>
<td>SPCOM 107</td>
<td>Introduction to Debate</td>
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GROUP AND ORGANIZATIONAL COMMUNICATION AREA - COMPLETE 3 UNITS

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<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>SPCOM 106</td>
<td>Group &amp; Organizational Communication</td>
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</tr>
<tr>
<td>SPCOM 109</td>
<td>Women in Management</td>
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PROFESSIONAL SKILLS AREA - COMPLETE 3 UNITS

<table>
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<tr>
<td>SPCOM 103</td>
<td>Interpersonal Communication</td>
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<tr>
<td>SPCOM 130</td>
<td>Intercultural Communication</td>
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</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 12

A.A. Degree: 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 hands-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 to local and national student film and video competitions. In addition, qualified students can secure internships with local production companies or the MJC TV-FILM production company. Students who enroll in the Television Production program will 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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 150</td>
<td>Introduction to the Media Arts</td>
<td>3</td>
</tr>
<tr>
<td>RATV 134</td>
<td>Television Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 135</td>
<td>Advance Television Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 142</td>
<td>Light, Sound, Camera, &amp; Editing Workshop</td>
<td>3</td>
</tr>
<tr>
<td>RATV 199C</td>
<td>MJC TV-FILM Production Company</td>
<td>3</td>
</tr>
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</table>

ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>RATV 139</td>
<td>Writing for Radio, TV and New Media</td>
<td>3</td>
</tr>
<tr>
<td>RATV 141</td>
<td>Documentary Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 143</td>
<td>Non-Line Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 178</td>
<td>Mass Media &amp; the Public</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 284</td>
<td>Desktop Video Animation</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 287</td>
<td>Introduction to Multimedia</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 16

A.A. Degree: Television Production

STUDENT LEARNING OUTCOMES

1. Operate TV studio, TV control room and field equipment to create a 5-25 minute television or video production.
2. Write program proposals and scripts for television productions.
3. Use digital editing software to record, playback and edit various audio and video materials.
4. Demonstrate ability to act as talent and direct talent in a television program.
5. Identify and utilize all stages of production to produce and direct a 5-minute video.
6. Define industry standard terminology and demonstrate its proper use.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATV 134</td>
<td>Television Studio Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 135</td>
<td>Advanced Television Production</td>
<td>3</td>
</tr>
<tr>
<td>RATV 142</td>
<td>Light, Sound, Camera and Editing Workshop</td>
<td>3</td>
</tr>
<tr>
<td>RATV 150</td>
<td>Introduction to the Media Arts</td>
<td>3</td>
</tr>
<tr>
<td>FILM 150</td>
<td>Film Production</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR 20

A.A. Degree: University Preparation, Emphasis in Communication (p. 168)
The Theatre Program at MJC is designed to prepare students to work in professional or semi-professional theatre situations or to transfer to four-year colleges and universities to pursue additional drama classes that may include preparation for teaching theatre. The program is designed to teach students the techniques of acting, costuming, directing, playwrighting, lighting, makeup, oral interpretation, stage design, and children’s theatre. The Theatre program provides students the opportunity to act in major productions.

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

<table>
<thead>
<tr>
<th>COURSE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>THETR 100 [NP] Introduction to Theatre Arts</td>
<td>3</td>
</tr>
<tr>
<td>THETR 175 [1] Stage Costuming</td>
<td>3</td>
</tr>
<tr>
<td>THETR 178 [2] Introduction to Scenery Design</td>
<td>3</td>
</tr>
<tr>
<td>THETR 182 [1] Practical Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THETR 183 [2] Fundamentals of Stage Make-up 1</td>
<td>1</td>
</tr>
<tr>
<td>THETR 190A [NP] Theatre Production Workshop</td>
<td>1</td>
</tr>
<tr>
<td>THETR 196 [NP] Theatre Management</td>
<td>1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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ELECTIVE COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
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<tbody>
<tr>
<td>THETR 122 [1] Introduction to Readers’ Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THETR 123 [NP] Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>THETR 131 [NP] Fundamentals of Choreography</td>
<td>3</td>
</tr>
<tr>
<td>THETR 195 [NP] Movement for the Performing Artist</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 15

A.A. Degree: Theatre

STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Theatre will be able to:

1. Demonstrate knowledge of theatre from a historical perspective.
2. Synthesize and apply information on contemporary trends and technologies in theatre.
3. Analyze a theatrical text.
4. Research and analyze the directing of other directors.
5. Demonstrate knowledge of theatrical protocol.
6. Demonstrate understanding of the collaborative nature of theatre.
7. Demonstrate the process required to prepare a resume, audition piece, or portfolio.
9. Employ initiative and leadership qualities in the individual development and growth.
10. Express creativity in the artistic process.

MAJOR REQUIREMENTS

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 65) or the University Preparation Pathway (p. 67) which include completion of the requirements below. Students should consult with a Theatre faculty advisor for selection of Elective Units. Students who plan to transfer to a four-year college or university should consult with a Theatre faculty advisor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 8 UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
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</thead>
<tbody>
<tr>
<td>THETR 100 [1] Introduction to Theatre Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES: GENERAL - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
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<tbody>
<tr>
<td>THETR 122 [1] Introduction to Readers’ Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THETR 123 [3] Storytelling</td>
<td>3</td>
</tr>
<tr>
<td>THETR 131 [NP] Fundamentals of Choreography</td>
<td>2</td>
</tr>
<tr>
<td>THETR 150 [NP] Elements of Playwrighting</td>
<td>3</td>
</tr>
<tr>
<td>THETR 156 [NP] Rehearsal and Performance in Comedy</td>
<td>2</td>
</tr>
<tr>
<td>THETR 157 [NP] Rehearsal and Performance in Drama</td>
<td>2</td>
</tr>
<tr>
<td>THETR 158 [NP] Rehearsal and Performance in Classical Theatre</td>
<td>2</td>
</tr>
<tr>
<td>THETR 159 [NP] Rehearsal and Performance in Musical Theatre</td>
<td>2</td>
</tr>
<tr>
<td>THETR 164 [NP] Improvisational Acting</td>
<td>3</td>
</tr>
<tr>
<td>THETR 165 [NP] History of the American Musical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THETR 175 [NP] Stage Costuming</td>
<td>3</td>
</tr>
<tr>
<td>THETR 178 [3] Introduction to Scenery Design</td>
<td>3</td>
</tr>
<tr>
<td>THETR 182 [3] Practical Stage Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THETR 183 [NP] Fundamentals of Stage Make-Up 1</td>
<td>1</td>
</tr>
<tr>
<td>THETR 184 [NP] Fundamentals of Stage Make-Up 2</td>
<td>1</td>
</tr>
<tr>
<td>THETR 190A [NP] Theatre Production Workshop</td>
<td>1</td>
</tr>
<tr>
<td>THETR 192 [NP] Rehearsal and Performance</td>
<td>2</td>
</tr>
<tr>
<td>THETR 194 [NP] Introduction to World Dance</td>
<td>3</td>
</tr>
<tr>
<td>THETR 196 [NP] Theatre Management</td>
<td>1</td>
</tr>
<tr>
<td>THETR 198 [NP] Special Topics</td>
<td>1-3</td>
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</tbody>
</table>

ELECTIVE COURSES: MOVEMENT - COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>THETR 170X,A [NP] Hip Hop</td>
<td>3</td>
</tr>
<tr>
<td>THETR 185X,A [NP] Beginning Modern Dance</td>
<td>3</td>
</tr>
<tr>
<td>THETR 186X,A [NP] Intermediate Modern Dance</td>
<td>3</td>
</tr>
<tr>
<td>THETR 188 [NP] Jazz Dance</td>
<td>1</td>
</tr>
<tr>
<td>THETR 189 [NP] Ballet 1</td>
<td>1</td>
</tr>
<tr>
<td>THETR 195 [NP] Movement for the Performing Artist</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR ................................................................. 20
Requirements and the current demands of employing agencies and transfer institutions. Justice advisor to select the courses most appropriate for meeting both the MJC Associate Degree and Institutions Code 8100-01-02-03.)

Patients. (Penal Code Section 12021 fi rearms, 12403.7 chemical agents, 12020 batons, and Welfare and mace, or baton are not open to individuals who have been convicted of a felony or who are mental

Prerequisites, unless specifically exempted by statute. Courses which involve the handling of fi rearms, all courses are open to individuals who have been admitted to the college and who meet the

Prior to use of a fi rearms in any course, each student must sign a declaration to the eff ect that he/she is not prohibited from such use by 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 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 firearms, 12403.7 chemical agents, 12020 batons, and Welfare and Institutions Code 8100-01-02-03.)

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.

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. 67) or the University Preparation Pathway (p. 65) 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</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>[1]</td>
<td>Introduction to Administration of Justice</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR ................................................................. 21

A.S. 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. 67) or the University Preparation Pathway (p. 65) 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</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>[1]</td>
<td>Introduction to Administration of Justice</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>

MINIMUM UNITS IN A.S. MAJOR ................................................................. 21
To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES – COMPLETE 23 UNITS**

- **HUMSR 101** [1] Introduction to Human Services ....................................................... 3
- **HUMSR 111** [2] Counseling in Chemical Dependency ............................................. 3
- **HUMSR 116** [1] Drugs and Alcohol in Society ....................................................... 3
- **HUMSR 117** [3] Intervention, Treatment Strategies in Chemical Dependency ...... 3
- **HUMSR 118** [3] Pharmacology of Abused Substances ........................................ 3
- **HUMSR 120** [4] Professional Development in the Helping Professions ............... 3
- **HUMSR 144** [1] Community Agency Service ...................................................... 3
- **HUMSR 145A-D** [NP] Community Agency Practicum ........................................ 1,2,3,4
- **ADJU 206** (NP) Multicultural Issues within Public Safety ............................... 3
- **ADJU 213** [1] Patron Procedures ........................................................................... 3
- **ADJU 215** [1] Introduction to Firearms .................................................................. 3
- **ADJU 216** [NP] Firearms & Range Application .................................................... 1½
- **ADJU 217** [2] Substance Abuse ............................................................................ 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

**MINIMUM UNITS IN A.A. MAJOR ........................................................................ 23**

**Chemical Dependency Counseling PROGRAM**

**A.A. Degree: Human Services/Chemical Dependency Counseling**

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below:

**REQUIRED COURSES – COMPLETE 12 UNITS**

- **ADJU 144** (NP) Community Agency Service .................................................... 1
- **ADJU 145A-D** (NP) Community Agency Practicum ........................................ 1,2,3,4
- **ADJU 206** (NP) Multicultural Issues within Public Safety ............................... 3
- **ADJU 213** [1] Patron Procedures ........................................................................... 3
- **ADJU 215** [1] Introduction to Firearms .................................................................. 3
- **ADJU 216** [NP] Firearms & Range Application .................................................... 1½
- **ADJU 217** [2] Substance Abuse ............................................................................ 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

**MINIMUM UNITS IN A.A. MAJOR ........................................................................ 23**

**Skills Recognition Award: Ethnic Studies**

**Supervisory Management in Public Safety**

- 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**

- **ADJU 351** (NP) Elements of Supervision in Public Safety ................................ 3
- **SUPR 364** (NP) Total Quality Management .................................................... 3
- **BUSAD 274** (NP) Human Resources Management .......................................... 3

**TOTAL UNITS FOR SKILLS RECOGNITION ......................................................... 12**

**Ethnic Studies PROGRAM**

**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**

- **ANTHR 102** (NP) Cultural Anthropology ....................................................... 3
- **HIST 107** (NP) World Civilization from the 16th Century ................................ 3
- **SPCOM 130** (NP) Intercultural Communication ............................................... 3

**COMPLETE ONE OPTION for 9 units, with 3 units completed each concentration.**

**I. International Studies Option:**

**A. EXAMINING CULTURE THROUGH THE ARTS AND LITERATURE: COMPLETE 3 UNITS**

- **ART 169** (NP) History of Non-Western Art .................................................. 3
- **ENGL 131** (NP) Introduction to World Literature to 1500 ................................. 3
- **ENGL 132** (NP) Introduction to World Lit. from 1500 to Present .................. 3
- **ENGL 151** (NP) Folklore .................................................................................... 3
- **ENGL 173** (NP) Introduction to Latin American Literature ......................... 3
- **HUMAN 110** (NP) East Meets West ................................................................. 3
- **MUSIC 169** (NP) Introduction to World Music ............................................... 3
- **THETR 102** (NP) World Theater ................................................................. 3
- **THETR/PE 194** (NP) World Dance ................................................................. 3

**B. EXAMINING HISTORICAL AND POLITICAL PERSPECTIVES – COMPLETE 3 UNITS**

- **BUSAD 208** (NP) Introduction to International Business ............................... 3
- **GEOG 110** (NP) World Regional Geography .................................................. 3
- **HIST 106** (NP) World Civilization from the 16th Century ............................ 3
- **HIST 125** (NP) History of Mexico ..................................................................... 3
- **POLSC 110** (NP) International Relations ....................................................... 3

**C. EXPLORING CULTURAL AND SOCIOLOGICAL ISSUES – COMPLETE 3 UNITS**

- **ANTHR 140** (NP) Magic, Witchcraft, & Religion ............................................. 3
- **ANTHR 150** (NP) Native People of North America ........................................ 3
- **GEOG 102** (NP) Cultural Geography ............................................................. 3
- **HUMAN 130** (NP) Introduction to Western Religions ....................................... 3
- **SOCSC 105** (NP) Women’s Studies ................................................................. 3

**II. Domestic Studies Option**

**A. EXAMINING CULTURE THROUGH ARTS AND LITERATURE – COMPLETE 3 UNITS**

- **ENGL 171** (NP) Introduction to African American Literature ....................... 3
- **ENGL 172** (NP) Introduction to Chicano Literature ......................................... 3
- **ENGL 179** (NP) Intro to Native American Lit, Mythology, and the Oral Tradition 3
- **HUMAN 120** (NP) Culture, Diversity, & Tolerance in the Arts ......................... 3
- **SPAN 112** (NP) Introduction to Chicano/a Literature ...................................... 3

**B. EXAMINING HISTORICAL AND POLITICAL PERSPECTIVES – COMPLETE 3 UNITS**

- **HIST 113** (NP) Social & Cultural Hist of the U.S prior to the 20th Century .......... 3
- **HIST 119** (NP) Social & Cultural Hist. of 20th Century America ..................... 3
- **HIST 128** (NP) History of the American Far Western Frontier ........................ 3
- **HIST 154** (NP) African Americans through the 19th Century ....................... 3
- **HIST 155** (NP) African Americans through the 20th & 21st Century ............. 3

**C. EXPLORING CULTURAL AND SOCIOLOGICAL ISSUES – COMPLETE 3 UNITS**

- **ADJU 206** (NP) Multicultural Issues within Public Safety ............................. 3
- **CLDDV 262** (NP) Diversity in Educational Settings ................................ .... 3
- **SOCIO 150** (NP) Ethnicity & Culture in America ........................................... 3
- **SOCIO 154** (NP) African-American Cultures and Communities ..................... 3
- **SOCIO 156** (NP) Mexican Culture in the United States .................................. 3

**TOTAL UNITS FOR SKILLS RECOGNITION ......................................................... 15**
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>
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</thead>
<tbody>
<tr>
<td>HUMSR 103</td>
<td>Introduction to Human Service Careers</td>
<td>1</td>
</tr>
<tr>
<td>GUIDE 110</td>
<td>Educational Planning</td>
<td>1</td>
</tr>
<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>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 and Culture in America</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 156</td>
<td>Mexican Culture in the United States</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 125</td>
<td>Sociology of the Family</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 144</td>
<td>Community Agency Practicum Discussion</td>
<td>1</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</td>
</tr>
<tr>
<td>PSYCH 130</td>
<td>Personal Adjustment</td>
<td>3</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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 17 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<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>
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<tr>
<td>HUMSR 144</td>
<td>Community Agency Practicum Discussion</td>
<td>1</td>
</tr>
<tr>
<td>HUMSR 145ABD</td>
<td>Community Agency Practicum</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>HUMSR 116</td>
<td>Drugs and Alcohol in Society</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 150</td>
<td>Minorities in America</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 156</td>
<td>Mexican Culture in the United States</td>
<td>3</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHR 102</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 103</td>
<td>Introduction to Human Service Careers</td>
<td>1</td>
</tr>
<tr>
<td>HUMSR 113</td>
<td>Co-Occurring Disorders</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 119</td>
<td>Introduction to Group Leadership &amp; Group Process</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 120</td>
<td>Professional Devt. in the Helping Professions</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 120</td>
<td>California Politics and Problems</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 51</td>
<td>Psychology in Everyday Life</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR A.A. MAJOR: 20

Psychosocial Rehabilitation PROGRAM

The Psychosocial Rehabilitation (PSR) program comes from the emerging need in the human services field to recruit and train 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/or 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 Discussion</td>
<td>1</td>
</tr>
<tr>
<td>HUMSR 145ABD</td>
<td>Community Agency Practicum</td>
<td>1, 2, 4</td>
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</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION: 9
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.

Certificate of Achievement: Accounting Clerk

REQUIRED COURSES - COMPLETE 14½ UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>1½ OR</td>
</tr>
<tr>
<td>OFADM 303</td>
<td>1½ OR</td>
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<tr>
<td>OFADM 356</td>
<td>1½ OR</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>1½ OR</td>
</tr>
<tr>
<td>OFADM 374</td>
<td>1½ OR</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>3½ OR</td>
</tr>
<tr>
<td>BUSAD 331</td>
<td>1½ OR</td>
</tr>
<tr>
<td>BUSAD 332</td>
<td>1½ OR</td>
</tr>
<tr>
<td>BUSAD 380</td>
<td>2½ OR</td>
</tr>
<tr>
<td>OFADM 375</td>
<td>1½ OR</td>
</tr>
<tr>
<td>MATH 50</td>
<td>3½ OR</td>
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TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................. 14½
A.A. Degree: Accounting

- To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>1</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>2</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>CMPS 201</td>
<td>2</td>
<td>General Computer Literacy</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>3</td>
<td>Computer Accounting</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>4</td>
<td>Business Law</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>1</td>
<td>Financial Accounting on Spreadsheet</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR ............................................. 20

A.S. Degree: Accounting

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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>BUSAD 201</td>
<td>1</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>2</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>CMPS 201</td>
<td>2</td>
<td>General Computer Literacy</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>3</td>
<td>Computer Accounting</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>4</td>
<td>Business Law</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>1</td>
<td>Financial Accounting on Spreadsheet</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BUSAD 319</td>
<td>3</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>BUSAD 204</td>
<td>3</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>BUSAD 336</td>
<td>3</td>
<td>Tax Accounting</td>
</tr>
<tr>
<td>CMPS 202</td>
<td>2</td>
<td>Business Information Systems</td>
</tr>
<tr>
<td>BUSAD 214</td>
<td>3</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>BUSAD 317</td>
<td>3</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>3</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>3</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>BUSAD 100</td>
<td>1</td>
<td>Success in Business</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 50</td>
<td>NP</td>
<td>Business Math</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>1</td>
<td>Bookkeeping 1</td>
</tr>
<tr>
<td>BUSAD 320</td>
<td>2</td>
<td>Bookkeeping 2</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>4</td>
<td>Computer Accounting</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>3</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>2</td>
<td>Machine Calculation</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>2</td>
<td>Spreadsheet Skills for Financial Accounting</td>
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ELECTIVE COURSES - COMPLETE 6 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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<tr>
<td>CMPS 202</td>
<td>NP</td>
<td>Business Information Systems</td>
</tr>
<tr>
<td>BUSAD 248</td>
<td>2</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>OFADM 203</td>
<td>NP</td>
<td>Intermediate Keyboarding</td>
</tr>
<tr>
<td>OFADM 205</td>
<td>NP</td>
<td>Records Management</td>
</tr>
<tr>
<td>BUSAD 377</td>
<td>2</td>
<td>Human Relations in Business</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .......................... 25

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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

REQUIRED COURSES - COMPLETE 19 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 50</td>
<td>NP</td>
<td>Business Math</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>1</td>
<td>Bookkeeping 1</td>
</tr>
<tr>
<td>BUSAD 320</td>
<td>2</td>
<td>Bookkeeping 2</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>4</td>
<td>Computer Accounting</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>3</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>2</td>
<td>Machine Calculation</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>2</td>
<td>Spreadsheet Skills for Financial Accounting</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 377</td>
<td>2</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>2</td>
<td>Principles of Marketing</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

REQUIRED COURSES - COMPLETE 19 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 50</td>
<td>NP</td>
<td>Business Math</td>
</tr>
<tr>
<td>BUSAD 310</td>
<td>1</td>
<td>Bookkeeping 1</td>
</tr>
<tr>
<td>BUSAD 320</td>
<td>2</td>
<td>Bookkeeping 2</td>
</tr>
<tr>
<td>BUSAD 203</td>
<td>4</td>
<td>Computer Accounting</td>
</tr>
<tr>
<td>BUSAD 319</td>
<td>3</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>BUSAD 300</td>
<td>2</td>
<td>Machine Calculation</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>2</td>
<td>Spreadsheet Skills for Financial Accounting</td>
</tr>
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ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 377</td>
<td>2</td>
<td>Human Relations in Business</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>2</td>
<td>Principles of Marketing</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR .......................................... 30

Bookkeeping PROGRAM

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. Student should have keyboarding skills. If not, he/she should take a basic 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.
Business Administration

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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below:

REQUIRED COURSES - COMPLETE 15 UNITS

- BUSAD 202 [3] Managerial Accounting .................................................. 4

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)

MINIMUM UNITS IN A.A. MAJOR ................................................................. 20

A.S. 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below:

REQUIRED COURSES - COMPLETE 20 UNITS

- BUSAD 240 [1] Principles of Management ................................................. 3

MINIMUM UNITS IN A.S. MAJOR ................................................................. 30

Business Operations

The Business Operations major is designed for those students seeking an A.A./A.S. degree in management and 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, organizing, 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below:

REQUIRED COURSES - COMPLETE 20 UNITS

- BUSAD 240 [1] Principles of Management ................................................. 3

MINIMUM UNITS IN A.A. MAJOR ................................................................. 20

A.S. 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. 67) or the University Preparation Pathway (p. 65) 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
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 1 ............................................... 3
- OFADM 303 [1] Keyboarding for Speed & Accuracy (twice at ½ unit) 1
- OFADM 304 [1] Professional English for Business .............. 3
- OFADM 313 [1] Office Skills .................................................. 3
- OFADM 353 [1] Introduction to Computers and Windows ....... 1
- OFADM 359 [2] 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 [1] 10-Key on the Computer ......................... 1

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.......................... 30**

**A.S. 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. 67) or the University Preparation Pathway (p. 65) 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**

- OFADM 320 [NP] Telephone Techniques .......................... 1
- OFADM 330 [NP] Beginning Word Processing ..................... 3
- OFADM 362 [NP] Introduction to Business Presentation Software 1
- OFADM 363 [NP] Understanding the Internet .................... 1
- OFADM 366 [NP] Proofreading Techniques ......................... 1
- BUSAD 300 [NP] Machine Calculation ............................ 2
- BUSAD 310 [NP] Bookkeeping 1 ........................................ 1

**MINIMUM UNITS IN A.S. MAJOR.................................................. 30**

**Computer Applications Specialist PROGRAM**

This award is designed for students who will work in a small business performing general computer application procedures such as document preparation, simple calculations using electronic spreadsheets, or simple database 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.

Certificate of Achievement: Computer Applications Specialist

**REQUIRED COURSES – COMPLETE 18 UNITS**

- CMPSC 201 [1] General Computer Literacy ......................... 3
- CMPGR 263 [1] Internet Literacy ..................................... 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT......................... 18**
The Computer Graphics Applications Associate Degree and Certificate program is structured to enable students to pursue a course of study and computer experience in career areas that rely on computer graphics applications. This program is designed to prepare students for employment, transfer to four year institutions, or to allow employees within these industries to upgrade their skills.

**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 37 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 120</td>
<td>1</td>
<td>Basic Drawing 1</td>
</tr>
<tr>
<td>ART 124</td>
<td>2</td>
<td>Color and Design 1</td>
</tr>
<tr>
<td>CMPGR 213</td>
<td>4</td>
<td>Applied Computer Graphics</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>1</td>
<td>Introduction to Computer Graphics</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>NP</td>
<td>Business Presentation Graphics</td>
</tr>
<tr>
<td>CMPGR 217</td>
<td>2</td>
<td>Computer Illustration Software</td>
</tr>
<tr>
<td>CMPGR 219*</td>
<td>4</td>
<td>Computer Graphics Portfolio Review</td>
</tr>
<tr>
<td>CMPGR 225</td>
<td>3</td>
<td>3D Modeling and Animation</td>
</tr>
<tr>
<td>CMPGR 235</td>
<td>2</td>
<td>Beginning Photoshop</td>
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<td>CMPGR 263</td>
<td>NP</td>
<td>Internet Literacy</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>NP</td>
<td>Publishing on the World Wide Web</td>
</tr>
<tr>
<td>CMPGR 267</td>
<td>2</td>
<td>Desktop Video Animation</td>
</tr>
<tr>
<td>CMPGR 298A,B</td>
<td>NP</td>
<td>Special Topics (with approval)</td>
</tr>
<tr>
<td>CMPGR 287</td>
<td>NP</td>
<td>Introduction to Multimedia</td>
</tr>
<tr>
<td>CMPGR 285A,B</td>
<td>NP</td>
<td>Special Projects</td>
</tr>
<tr>
<td>CMPGR 269</td>
<td>4</td>
<td>Flash: Web Graphics and Animation 1</td>
</tr>
<tr>
<td>CMPGR 268</td>
<td>3</td>
<td>Flash: Web Graphics and Animation 2</td>
</tr>
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<td>CMPSC 201</td>
<td>1</td>
<td>General Computer Literacy</td>
</tr>
<tr>
<td>CMPSC 202</td>
<td>3</td>
<td>Business Information Systems</td>
</tr>
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### ELECTIVE COURSES - COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 160</td>
<td>NP</td>
<td>Appreciation of Art</td>
</tr>
<tr>
<td>ART 170</td>
<td>NP</td>
<td>Basic Photography 1</td>
</tr>
<tr>
<td>ART 181</td>
<td>NP</td>
<td>Basic Photography 2</td>
</tr>
<tr>
<td>CGR 201</td>
<td>NP</td>
<td>Graphic Arts Fundamentals</td>
</tr>
<tr>
<td>CGR 213</td>
<td>1</td>
<td>InDesign and Typography 1</td>
</tr>
<tr>
<td>CGR 224</td>
<td>NP</td>
<td>Electronic Publishing</td>
</tr>
<tr>
<td>ART 135</td>
<td>NP</td>
<td>Figure Drawing</td>
</tr>
<tr>
<td>ELTCC 315</td>
<td>NP</td>
<td>Introduction to Media Systems</td>
</tr>
<tr>
<td>DIGS 210</td>
<td>NP</td>
<td>Introduction to Computer Aided Drafting</td>
</tr>
<tr>
<td>CMPGR 236</td>
<td>NP</td>
<td>Advanced Photoshop</td>
</tr>
<tr>
<td>CMPGR 252</td>
<td>3</td>
<td>Desktop Publishing for Computer Graphics</td>
</tr>
<tr>
<td>CMPGR 262</td>
<td>NP</td>
<td>Exploring the World Wide Web</td>
</tr>
<tr>
<td>CMPGR 263</td>
<td>NP</td>
<td>Internet Literacy</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>NP</td>
<td>Publishing on the World Wide Web</td>
</tr>
<tr>
<td>CMPGR 265</td>
<td>NP</td>
<td>Multimedia on the World Wide Web</td>
</tr>
<tr>
<td>CMPGR 267</td>
<td>2</td>
<td>Dreamweaver in Website Design</td>
</tr>
<tr>
<td>CMPGR 268</td>
<td>3</td>
<td>Flash: Web Graphics and Animation 1</td>
</tr>
<tr>
<td>CMPGR 269</td>
<td>4</td>
<td>Flash: Web Graphics and Animation 2</td>
</tr>
<tr>
<td>CMPGR 285A,B</td>
<td>NP</td>
<td>Special Projects</td>
</tr>
<tr>
<td>CMPGR 287</td>
<td>NP</td>
<td>Introduction to Multimedia</td>
</tr>
<tr>
<td>CMPGR 289A,B</td>
<td>NP</td>
<td>Special Topics (with approval)</td>
</tr>
<tr>
<td>RATV 134</td>
<td>NP</td>
<td>Television Studio Operations</td>
</tr>
<tr>
<td>ARCH 110</td>
<td>NP</td>
<td>Descriptive Drawing</td>
</tr>
<tr>
<td>CMPSC 267</td>
<td>NP</td>
<td>Microsoft Windows - Advanced</td>
</tr>
</tbody>
</table>

**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. 67) or the University Preparation Pathway (p. 65), which include completion of Required and Elective courses for certificate, with the exception of CMPGR 219.

**TOTAL UNITS REQUIRED IN A.S. MAJOR**

### PROGRAMS IN BUSINESS

**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. 67) or the University Preparation Pathway (p. 65), 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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 202</td>
<td>1</td>
<td>Business Information Systems</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>1</td>
<td>Financial Accounting</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>2</td>
<td>Managerial Accounting</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>4</td>
<td>Business Law</td>
</tr>
<tr>
<td>CMPSC 275</td>
<td>2</td>
<td>Database Management Systems for Microcomputers</td>
</tr>
<tr>
<td>CMPSC 220</td>
<td>4</td>
<td>Database Server Administration</td>
</tr>
</tbody>
</table>

### MINIMUM UNITS IN A.A. MAJOR

**TOTAL UNITS REQUIRED**

**39**

**MINIMUM UNITS REQUIRED FOR CERTIFICATE OF ACHIEVEMENT**

**39**

* Not required for A.S. Degree
Computer Programming Specialist PROGRAM

Certificate of Achievement: Computer Programming Specialist

This Skills Recognition Award 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 .......................................... 4
- CMPSC 206 [2] UNIX/Linux OS ............................................................................... 3

ELECTIVE COURSES – COMPLETE 3-4 UNITS

- CMPSC 261 [3] Problem Solving and Programming 2 .......................................... 4

MINIMUM UNITS FOR CERTIFICATE OF ACHIEVEMENT ................................. 16

Computer Science PROGRAM

The Computer Science A.S. Degree program at Modesto Junior College is designed to meet the needs of non-transfer students who wish to acquire the new computer skills needed in today's work environment. The Computer Science program provides students with a general knowledge of computer literacy and information systems, microcomputer hardware and software systems, the ability to work with a wide variety of applications software, and an opportunity to develop programming and problem-solving skills.

Students who wish to major in Computer Science and transfer to a four-year institution should ask for program planning assistance from a business program advisor. Modesto Junior College offers a Computer Science transfer major to meet the major requirement for the associate degree. 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 the transfer institution's major requirements have been met. Consult a Computer Science faculty advisor for assistance in determining the appropriate courses for the major you select.

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. 67) or the University Preparation Pathway (p. 65) 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 20 UNITS

- CMPSC 205 [2] Problem Solving and Programming 1 .......................................... 4
- CMPSC 261 [3] Problem Solving and Programming 2 .......................................... 4
- MATH 122 [1] Functions and Analytical Geometry ................................. 4 OR (Higher Math)

MINIMUM UNITS FOR A.A. MAJOR .............................................................. 20
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. 67) or the University Preparation Pathway (p. 65) 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 OPTION - COMPLETE ONE OPTION FOR 30-33 UNITS**

### Information Systems Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPS 203</td>
<td>Technical Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 204</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 275</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 282</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 213</td>
<td>Programming with Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 276</td>
<td>Web Database Development</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 225</td>
<td>Database Programming with SQL</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 278</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 220</td>
<td>Database Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 294</td>
<td>Computer Science Final Project</td>
<td>3</td>
</tr>
</tbody>
</table>

### Networking Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPS 204</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 263</td>
<td>Networking Essentials</td>
<td>4</td>
</tr>
<tr>
<td>CMPS 206</td>
<td>UNIX/Linux OS</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 220</td>
<td>Database Server Administration</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 264</td>
<td>Windows Server OS</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 225</td>
<td>Database Programming with SQL</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 281</td>
<td>Advanced Networking and Security</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 289</td>
<td>Directory Services</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 202</td>
<td>Business Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 294</td>
<td>Computer Science Final Project</td>
<td>3</td>
</tr>
</tbody>
</table>

### Programming Option

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPS 201</td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 204</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 205</td>
<td>Problem Solving and Programming 1</td>
<td>4</td>
</tr>
<tr>
<td>CMPS 206</td>
<td>UNIX/Linux OS</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 213</td>
<td>Programming with Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 214</td>
<td>Advanced Visual Basic</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 216</td>
<td>Script Programming for the Web</td>
<td>3</td>
</tr>
<tr>
<td>CMPS 261</td>
<td>Problem Solving and Programming 2</td>
<td>4</td>
</tr>
<tr>
<td>CMPS 241</td>
<td>Assembly Language Programming</td>
<td>4</td>
</tr>
<tr>
<td>CMPS 294</td>
<td>Computer Science Final Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>Financial Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 208</td>
<td>Survey of International Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 209</td>
<td>Import/Export Fundamentals</td>
<td>3</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>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** \(17\)

**MINIMUM UNITS IN A.S. MAJOR** \(30-33\)
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 for-profit and non-profit 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Cr.</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 210</td>
<td>NP</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>NP</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 245</td>
<td>NP</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 299A,B</td>
<td>NP</td>
<td>Marketing Projects</td>
<td>1-2</td>
</tr>
<tr>
<td>BUSAD 358</td>
<td>NP</td>
<td>Sales and Ad Promotion</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>NP</td>
<td>Business Presentation Graphics</td>
<td>3</td>
</tr>
<tr>
<td>CMPSC 201</td>
<td></td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

ELECTIVE COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Cr.</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSAD 201</td>
<td>NP</td>
<td>Bookkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>NP</td>
<td>Business Law</td>
<td>4</td>
</tr>
<tr>
<td>BUSAD 200</td>
<td>NP</td>
<td>Spreadsheet Skills for Financial Accounting</td>
<td>2</td>
</tr>
</tbody>
</table>

ANY 4-5 UNITS OF COURSEWORK IN BUSAD, OFADM OR CMPSC.

MINIMUM UNITS IN A.S. MAJOR .............................................. 30

Network Administration PROGRAM

This certificate is designed for students seeking entry-level job 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>Cr.</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 206</td>
<td>[1]</td>
<td>UNIX/Linux OS</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.......................... 15

Certificate of Achievement: Computer Network Technician

This certificate of achievement is designed for students seeking an entry-level position in computer network hardware installation, troubleshooting and 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 COURSES - COMPLETE 14 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Cr.</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 201</td>
<td></td>
<td>General Computer Literacy</td>
<td>3</td>
</tr>
<tr>
<td>CMPET 206</td>
<td></td>
<td>Personal Computer Assembly, Upgrading and Repair</td>
<td>3</td>
</tr>
<tr>
<td>CMPET 210</td>
<td></td>
<td>Intermediate Personal Computer Assembly, Upgrading, and Repair (CompTIA A+)</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 262</td>
<td>[1]</td>
<td>Exploring the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CMPSC 263</td>
<td>[2]</td>
<td>Networking Essentials</td>
<td>4</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Cr.</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC 206</td>
<td></td>
<td>UNIX/Linux Systems and Programming</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 208</td>
<td>[1]</td>
<td>World of Electricity and Electronics</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT.......................... 17
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>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 202</td>
<td>Intermediate Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>Business Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 314</td>
<td>Office Procedures and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 315</td>
<td>Today’s Office</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>Introduction to Spreadsheet Software</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>Introduction to Databases</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 363</td>
<td>Understanding the Internet</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 320</td>
<td>Telephone Techniques</td>
<td>1</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>Business Communication</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 232</td>
<td>Advanced Word Processing &amp; Desktop Pub.</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 328B</td>
<td>Machine Transcription</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 375</td>
<td>10-Key on the Computer</td>
<td>1</td>
</tr>
<tr>
<td>CMPGR 215</td>
<td>Business Presentation Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 50</td>
<td>Business Math</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 32

A.S. 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. 67) or the University Preparation Pathway (p. 65) which include completion of the required coursework. The following Elective courses are optional and may be repeated up to a maximum of 2 units.

ELECTIVE COURSES - COMPLETE 10 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>3</td>
</tr>
<tr>
<td>OFADM 328A-B</td>
<td>Machine Transcription</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 375</td>
<td>10-Key on the Computer</td>
<td>1</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>Elements of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR ......................................................... 30

Office Computer Applications PROGRAM

The Office Computer Applications Certificate of Achievement will be given for occupational preparation and/or career supplementation and/or career upgrading. 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 18 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 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>CMPGR 278</td>
<td>Spreadsheet Software</td>
<td>2</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>

MINIMUM UNITS FOR CERTIFICATE OF ACHIEVEMENT ..................................... 17

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. 67) or the University Preparation Pathway (p. 65) which include completion of the required coursework. The following Elective courses are optional and may be repeated up to a maximum of 2 units.

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 202</td>
<td>Intermediate Keyboarding</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>Intermediate Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 320</td>
<td>Intermediate Keyboarding</td>
<td>1</td>
</tr>
<tr>
<td>OFADM 311</td>
<td>Business Proofreading and Editing</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 314</td>
<td>Office Procedures and Technologies</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 315</td>
<td>Today’s Office</td>
<td>2</td>
</tr>
<tr>
<td>OFADM 359</td>
<td>Introduction to Spreadsheet Software</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>
<tr>
<td>BUSAD 210</td>
<td>Business Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR ............................................................. 20
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 18 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1.5</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1.5</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>1</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>
</tbody>
</table>

MINIMUM UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 17

Professional Selling

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 of creative selling as 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 to 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>Course 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</td>
</tr>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td>3 OR</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</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>Principles of 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
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>Course 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>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLES 382</td>
<td>Legal Aspects of Real Estate</td>
<td>3 OR</td>
</tr>
<tr>
<td>BUSAD 218</td>
<td>Business Law</td>
<td>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 Communication ........ 3

**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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below

**REQUIRED COURSES - COMPLETE 20 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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</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>

**MINIMUM 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. 67) or the University Preparation Pathway (p. 65) 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>Course 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</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>

**ELECTIVE COURSES - COMPLETE 10 UNITS (SEE ABOVE)**

**MINIMUM UNITS IN A.S. MAJOR ................................................................. 30**

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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFADM 301</td>
<td>Beginning Keyboarding</td>
<td>1.5</td>
</tr>
<tr>
<td>OFADM 302</td>
<td>Beginning Document Processing</td>
<td>1.5</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 313</td>
<td>Office Skills</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 361</td>
<td>Introduction to Databases</td>
<td>1</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>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT........................................ 16**

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 with 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 Code</th>
<th>Course 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 OR</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>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>Group Organizational Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>Principles of Management</td>
<td>3 OR</td>
</tr>
<tr>
<td>SUPR 351</td>
<td>Elements of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>
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**
- SUPR 106 [1] Group and Organizational Communication .......................... 3
- SUPR 351 [1] Elements of Supervision ......................................................... 3

**ELECTIVE COURSES - COMPLETE 9 UNITS**
- Any course in Business Administration, Computer Science, or Office Administration.

**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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. Students should consult with a Supervisory Management advisor for selection of elective units.

**REQUIRED COURSES - COMPLETE 12 UNITS**
- BUSAD 310 [2] Bookkeeping 1 ................................................................. 3 OR
- BUSAD 201 [NP] Financial Accounting ...................................................... 4
- OFADM 311 [NP] Business Proofreading and Editing ................................. 3

**TOTAL UNITS FOR A.A. MAJOR** .................................................................... 21

**A.S. 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. Students should consult with a Supervisory Management advisor for selection of elective units.

**REQUIRED COURSES - COMPLETE 9 UNITS**
- BUSAD 310 [2] Bookkeeping 1 ................................................................. 3 OR
- BUSAD 201 [NP] Financial Accounting ...................................................... 4
- BUSAD 274 [NP] Business Communication ................................................ 3
- OFADM 361 [2] Introduction to Spreadsheet Software ............................... 1
- BUSAD 310 [NP] Bookkeeping 1 ................................................................. 3
- OFADM 359 [1] Introduction to Desktop Publishing ................................. 1

**ELECTIVE COURSES - COMPLETE 6 UNITS**
- CMPGR 217 [NP] Computer Animation Software ....................................... 3
- CMPGR 235 [NP] Beginning Photoshop ...................................................... 3

**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.

**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 in this program, the student must complete the following coursework. Each course must be completed with a grade of C or better.

**REQUIRED COURSES - COMPLETE 26 UNITS**
- OFADM 303 [NP] Keyboarding for Speed & Accuracy (twice at ½ unit) .......... 1
- OFADM 203 [1] Intermediate Keyboarding .................................................. 3
- OFADM 311 [1] Business Proofreading and Editing .................................... 3
- OFADM 359 [1] Introduction to Desktop Publishing .................................... 1
- OFADM 361 [2] Introduction to Databases .................................................... 1
- OFADM 363 [1] Understanding the Internet ................................................ 1
- OFADM 364 [1] Grammar in the Office ......................................................... 1

**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.
Seeking an education to better himself and the world...

Manny was raised in Modesto primarily by his maternal grandmother. In his freshman year at Downey High School he experienced what he calls the “growing pains of adolescence.” So his grandmother sent him to a military school in Montana for the last three years of high school where he gained more structure and discipline. The experience helped shape Manny into a young man who feels blessed and wants to pass along his good fortune by giving back to his family and his community. He says that while his grandfather instilled him with moral fiber, it is his grandmother whom he idolizes. “If it wasn’t for her perseverance, I wouldn’t be the person I am today. She overcame polio, a rebellious daughter and the death of her husband and went on to raise three grandchildren on her own. Every time I get tired or frustrated I just think of her.”

After high school Manny held a variety of jobs. He was working in the construction industry when the economic crisis hit, bringing his employment opportunities to a standstill. Manny decided it was time to pursue a college education and enrolled at MJC in fall 2008, becoming, along with his younger sister, the first in their family to attend college.

While Manny is a huge Oakland Raiders fan, he never played football in school. However, this doesn’t mean he is one to sit on the sidelines and not get involved! While attending MJC he served as a student representative on the college’s Budget and Planning Committee. He joined the Alpha Gamma Sigma honor society, serving as the AGS representative to Inter-Club Council and later as their Vice President, earning a lifetime membership in AGS upon graduation last April. His positive outlook also earned him the TRIO program’s “Best Attitude Award” last spring.

Manny earned an Associate of Arts degree in Transfer Studies at MJC and is now attending CSU Stanislaus, where he plans to earn a Bachelor’s degree in Finance. He hopes to eventually pursue a Master’s in Business Administration or attend law school specializing in corporate law. He dreams of one day owning a business or even a string of businesses that will provide employment opportunities for his family and community. “I like the whole family business concept. I’m interested in the stock market and having my own trading company or maybe being a mortgage broker.”

One of Manny’s favorite subjects was Professor James McGarry’s Business Law class because it dealt with legal intricacies and how to protect yourself in the business world. He also holds great admiration for English Professor Lillian Vallee. “She was able to open my mind and help me see things in a different light. She is also one of the most altruistic and understanding persons I’ve ever met.” Manny’s business heroes include Donald Trump because of his strong will and the astonishing way he managed to dig himself out of debt, and Bill Gates for his generous philanthropy. “I want to do that also - leave the world a little better place than when I came into it. I’m very appreciative for what I have and want to demonstrate my gratefulness through action.”

Manny is an avid sports fan who carves out time around his studies to watch the Raiders and the Oakland A’s. He combines his love of sports with his passion for cooking by inviting friends over to watch a game and barbecuing for them, with his specialty being original marinades and chicken wings.

Asked how he might counsel other MJC students Manny doesn’t hesitate. “I would like to encourage every student to get involved, whether through clubs or athletics, and take advantage of the support services available such as EOPS and TRIO. Also, don’t just look at what is in front of you but try to see the big picture and always seek to help others.”

Emmanuel “Manny” Morales

“What I really like about MJC is the diversity of thought amongst the professors. They help you see things from different points of view. You hear a variety of perspectives and conversations on controversial subjects that were not discussed in high school.”
Educational Programs in 
Career Technical Education

Pedro Mendez, Interim Dean
West Campus
John Muir Hall
(209) 575-6332
SUPPORT STAFF
Traci Wade, Administrative Specialist
Renee Valasquez, Grant Support Specialist
Macario Ramirez, Inst. Support Specialist
Irene Nunez, Graphic Arts Tech.
Russ Caton, Lab Assistant I/

Degrees and/or Certificates Offered:

Autobody/Collision Repair, AA, SR
Automotive Refinishing, AS, SR
Automotive Technician, AS, C
Building and Safety Code Administration, AS, C
CNC Operator, SR
CNC Programmer, SR
Computer Electronics, AS, AA, C
Construction-Carpentry, SR
Construction-General, SR
Fabrication Technician, C
Photoetching, Printing, C

Gas Tungsten Arc Welding, SR
Gas Metal Arc Welding, SR
Industrial Technology Systems, AS, C
Electrical, AS, C
Maintenance, AS, C
Technician, C
Prepress, C
Presses and Bindery, C
Printing Maintenance, C
General Plant Maintenance, AS, AA, C
Graphic Design, AS, AA, C

Home Building Technologies, AS, C
Industrial Electronics, AS, C
Machine Tool Technology, AS, SR
Maintenance Electrician, AS, AA, C
Maintenance Mechanic, C
Maintenance Mechanic, SR
Pipe Welding, SR
Sheet Metal Fabricator, SR
Shielded Arc Welding, SR
Welding, AS, AA, SR

A.A. Degree: Autobody/Collision Repair

The Auto Body A.A. degree is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory and hands-on activities required to perform practical repair operations.

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 24 UNITS

AUBDY 115 [1] Introduction to Technical Industries .............................. 1
AUTC 311 [1] Basic Automotive Systems .............................................. 4
AUBDY 301 [1] Automotive Collision Repair 1 ..................................... 5
AUBDY 303 [3] Automotive Collision Repair 3 ..................................... 4

MINIMUM UNITS IN A.A. MAJOR .................................................. 24

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

MATH 20 [1,2,3] Pre-Algebra ................................................................. 5 OR
Eligibility for MATH 70 through Placement Exam

REQUIRED COURSES - COMPLETE 24 UNITS

AUBDY 115 [1] Introduction to Technical Industries .............................. 1
AUTC 311 [1] Basic Automotive Systems .............................................. 4
AUBDY 301 [1] Automotive Collision Repair 1 ..................................... 5
AUBDY 303 [3] Automotive Collision Repair 3 ..................................... 4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT .................. 24
Skills Recognition Award: Autobody/Refinishing

EXPECTED STUDENT LEARNING OUTCOMES
Students who earn a Certificate of Achievement in Autobody/Refinishing will be able to:
1. Comply with current autobody industry safety and environmental standards.
2. Perform body repairs to vehicles in accordance with autobody industry standards.
3. Work successfully in the autobody repair industry.

REQUIREMENTS FOR SKILLS RECOGNITION
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>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115</td>
<td>[1] Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 321</td>
<td>[1] Automotive Spray Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 399</td>
<td>[3] Independent Study</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ............................................ 8

A.S. Degree: Autobody/Refinishing

EXPECTED STUDENT LEARNING OUTCOMES
In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students complete the Associate's Degree in Autobody Refinishing will be able to:

1. Comply with current autobody industry safety and environmental standards.
2. Perform body and associated mechanical repairs to vehicles in accordance with autobody industry standards.
3. Work successfully in the autobody repair 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 27½ UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115</td>
<td>[1] Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 301</td>
<td>[1] Automotive Collision Repair 1</td>
</tr>
<tr>
<td>AUBDY 303</td>
<td>[3,4] Automotive Collision Repair 3</td>
</tr>
<tr>
<td>AUBDY 321</td>
<td>[1,2] Automotive Spray Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 322</td>
<td>[2,3,4] Automotive Spray Refinishing 2</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>[2] Steering, Suspension, and Alignment</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>[2] Independent Study</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR A.S. MAJOR ............................................................ 31

Elective Courses - Complete a minimum of 3½ units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 321</td>
<td>[3,4] A5: Braking Systems</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>[3,4] A6: Automotive Electricity</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR ............................................................ 31

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</td>
<td>[1,2,3] Pre-Algebra</td>
</tr>
</tbody>
</table>

Eligibility for MATH 70 by MJC assessment process

REQUIRED COURSES - COMPLETE 11 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 115</td>
<td>[1] Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>[1] Basic Automotive Systems</td>
</tr>
<tr>
<td>AUTEC 208</td>
<td>[2,3] World of Electricity and Electronics</td>
</tr>
<tr>
<td>MACH 211D</td>
<td>[1] Machine Tool Technology 1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 27 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 315</td>
<td>[1,2,3] Engine Rebuilding</td>
</tr>
<tr>
<td>AUTEC 317</td>
<td>[3,4] A7: Auto Heating and Air Conditioning</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>[2,3,4] A4: Steering, Suspension, &amp; Alignment</td>
</tr>
<tr>
<td>AUTEC 323</td>
<td>[2,3,4] A2: Automatic Transmissions &amp; Transaxles</td>
</tr>
<tr>
<td>AUTEC 399</td>
<td>[2] 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 11 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 115</td>
<td>1</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>1</td>
</tr>
<tr>
<td>EITEC 208</td>
<td>1</td>
</tr>
<tr>
<td>MACH 301</td>
<td>1</td>
</tr>
<tr>
<td>MACH 213C</td>
<td>1</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>2</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.S. MAJOR .......................................................... 30**

### Automotive Maintenance PROGRAM

**Certificate of Achievement: Automotive 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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>1,2,3</td>
</tr>
</tbody>
</table>

*Eligibility for MATH 70 by MJC assessment process*

**REQUIRED COURSES - COMPLETE 14 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 115</td>
<td>1</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>1</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>2,3</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>2,3</td>
</tr>
<tr>
<td>MACH 213C</td>
<td>1</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 37**
A.S. Degree: 
**Building and Safety Code 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. 67) or the University Preparation Pathway (p. 65) which include completion of the required courses for certificate of achievement, completion at least 6 elective units. Each course must be completed with a grade C or better.

**MINIMUM UNITS REQUIRED IN A.S. MAJOR** ................................................ 30

---

**Construction PROGRAM**

Skills Recognition Award: 
**Construction—Carpentry**

**REQUIRED COURSES** – COMPLETE 13 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 380</td>
<td>5</td>
<td>Elementary Carpentry &amp; Construction</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>3</td>
<td>Principles of Electrical Wiring</td>
</tr>
<tr>
<td>INTEC 200</td>
<td>3</td>
<td>Introduction to Mechanical Technology</td>
</tr>
<tr>
<td>VOCWE 349A-D</td>
<td>2</td>
<td>Work Experience</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES** – COMPLETE 2 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 301</td>
<td>2</td>
<td>Employability Skills 1</td>
</tr>
<tr>
<td>AGM 230</td>
<td>2</td>
<td>Field Surveying</td>
</tr>
<tr>
<td>ENGT 375</td>
<td>2</td>
<td>Construction Blueprint Reading</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>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 380</td>
<td>5</td>
<td>Elementary Carpentry &amp; Construction</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>3</td>
<td>Principles of Electrical Wiring</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>3</td>
<td>Electrical Codes &amp; Ordinances</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>4</td>
<td>Plumbing Principles and Methods</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>2</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>3</td>
<td>Uniform Building Code - Structural</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>3</td>
<td>Uniform Building Code - Nonstructural</td>
</tr>
<tr>
<td>INTEC 346</td>
<td>2</td>
<td>Enforce Bldg Repair &amp; Abatement Reg</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>4</td>
<td>Plumbing Principles and Methods</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................... 24

---

**Home Building 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>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>1</td>
<td>Principles of Electrical Wiring</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>3</td>
<td>Electrical Codes &amp; Ordinances</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>4</td>
<td>Analysis of Electrical Codes</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>2</td>
<td>Intro to Occupational Safety &amp; Health</td>
</tr>
<tr>
<td>INTEC 340</td>
<td>3</td>
<td>Uniform Building Code - Structural</td>
</tr>
<tr>
<td>INTEC 341</td>
<td>3</td>
<td>Uniform Building Code - Nonstructural</td>
</tr>
<tr>
<td>INTEC 346</td>
<td>3</td>
<td>Enforce Bldg Repair &amp; Abatement Reg</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>4</td>
<td>Plumbing Principles and Methods</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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**ELECTIVE COURSES: SELECT 6 OR MORE UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>2,4</td>
<td>Fundamentals of Industrial Technology</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>3</td>
<td>World of Electricity &amp; Electronics</td>
</tr>
<tr>
<td>INTEC 365</td>
<td>2,4</td>
<td>Heating, Ventilation, Air Cond. &amp; Refrig.</td>
</tr>
<tr>
<td>ENGT 375</td>
<td>1,3</td>
<td>Construction Blueprint Reading</td>
</tr>
<tr>
<td>INTEC 379</td>
<td>1,3</td>
<td>Uniform Plumbing Code</td>
</tr>
<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 - Laboratory</td>
</tr>
</tbody>
</table>

**AND**

**MINIMUM UNITS REQUIRED IN 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</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC</td>
<td>278</td>
<td>[3,4] Spreadsheet Software</td>
</tr>
<tr>
<td>CMPSC</td>
<td>276</td>
<td>[4] Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC</td>
<td>264</td>
<td>[3-4] Windows Server OS</td>
</tr>
<tr>
<td>CMPSC</td>
<td>263</td>
<td>[3-4] Networking Essentials</td>
</tr>
<tr>
<td>CMPSC</td>
<td>213</td>
<td>[3or4] Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPET</td>
<td>269</td>
<td>[2,3,4] Network+ Certification Training Lab</td>
</tr>
<tr>
<td>CMPET</td>
<td>206</td>
<td>[2] 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</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET</td>
<td>210</td>
<td>(3,4) Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET</td>
<td>222</td>
<td>[NP] Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>234</td>
<td>(2,3,4) Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>269</td>
<td>(2,3,4) Network+ Certification Training Lab</td>
</tr>
<tr>
<td>EL TEC</td>
<td>208</td>
<td>[1] The World of Electricity and Electronics</td>
</tr>
</tbody>
</table>

**COMPUTER AREA**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC</td>
<td>205</td>
<td>[3] Problem Solving and Programming 1</td>
</tr>
<tr>
<td>CMPSC</td>
<td>213</td>
<td>(3,4) Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPSC</td>
<td>263</td>
<td>[3,4] Networking Essentials</td>
</tr>
<tr>
<td>CMPSC</td>
<td>264</td>
<td>[3,4] Windows Server OS</td>
</tr>
<tr>
<td>CMPSC</td>
<td>276</td>
<td>[4] Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC</td>
<td>278</td>
<td>[3,4] Spreadsheet Software</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT**                                             35

---

### A.A. Degree: Computer 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 16 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPSC</td>
<td>264</td>
<td>[2] Introduction to Programming</td>
</tr>
<tr>
<td>CMPET</td>
<td>206</td>
<td>(2,3,4) Personal Computer Assembling, Upgrading, and Repair</td>
</tr>
<tr>
<td>CMPET</td>
<td>212</td>
<td>[1] Digital Principles and Circuits</td>
</tr>
<tr>
<td>CMPET</td>
<td>214</td>
<td>(2,3,4) Microprocessor Programming and Interfacing</td>
</tr>
<tr>
<td>EL TEC</td>
<td>208</td>
<td>[1] The World of Electricity and Electronics</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 4 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
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<tbody>
<tr>
<td>CMPET</td>
<td>210</td>
<td>(3,4) Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET</td>
<td>227</td>
<td>(2,3,4) Introduction to Automated Process Control Systems</td>
</tr>
<tr>
<td>CMPET</td>
<td>232</td>
<td>[NP] Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>234</td>
<td>(2,3,4) Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>269</td>
<td>(2,3,4) Network+ Certification Training Lab</td>
</tr>
<tr>
<td>CMPSC</td>
<td>205</td>
<td>[3] Problem Solving and Programming 1</td>
</tr>
<tr>
<td>CMPSC</td>
<td>213</td>
<td>[3or4] Programming with Visual Basic</td>
</tr>
<tr>
<td>CMPSC</td>
<td>263</td>
<td>[3,4] Networking Essentials</td>
</tr>
<tr>
<td>CMPSC</td>
<td>264</td>
<td>[3,4] Windows Server OS</td>
</tr>
<tr>
<td>CMPSC</td>
<td>276</td>
<td>[4] Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC</td>
<td>278</td>
<td>[3,4] Spreadsheet Software</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.A. MAJOR**                                                  20

---

### 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES - COMPLETE 16 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET</td>
<td>206</td>
<td>(2,3,4) Personal Computer Assembling, Upgrading, and Repair</td>
</tr>
<tr>
<td>CMPET</td>
<td>212</td>
<td>[1] Digital Principles and Circuits</td>
</tr>
<tr>
<td>CMPET</td>
<td>214</td>
<td>(2,3,4) Microprocessor Programming and Interfacing</td>
</tr>
<tr>
<td>CMPSC</td>
<td>204</td>
<td>[2] Introduction to Programming</td>
</tr>
<tr>
<td>EL TEC</td>
<td>208</td>
<td>[1] The 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</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMPET</td>
<td>210</td>
<td>[NP] Intermediate-Personal Computer Servicing</td>
</tr>
<tr>
<td>CMPET</td>
<td>222</td>
<td>[NP] Introduction to Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>234</td>
<td>(2,3,4) Advanced Topics in Programmable Logic Controllers</td>
</tr>
<tr>
<td>CMPET</td>
<td>269</td>
<td>(2,3,4) Network+ Certification Training Lab</td>
</tr>
<tr>
<td>EL TEC</td>
<td>221</td>
<td>(2,3,4) Instrumentation Devices and Systems</td>
</tr>
</tbody>
</table>

**COMPUTER SCIENCE AREA**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>CMPSC</td>
<td>213</td>
<td>(3-4) Programming with Visual Basic</td>
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<tr>
<td>CMPSC</td>
<td>263</td>
<td>(3-4) Networking Essentials</td>
</tr>
<tr>
<td>CMPSC</td>
<td>264</td>
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<tr>
<td>CMPSC</td>
<td>276</td>
<td>[4] Introduction to Data Warehousing</td>
</tr>
<tr>
<td>CMPSC</td>
<td>278</td>
<td>[3-4] Spreadsheet Software</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.S. MAJOR**                                               30
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 16 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 201</td>
<td>Graphic Arts Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ART 120</td>
<td>Basic Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 124</td>
<td>Color and Design 1</td>
<td>3</td>
</tr>
<tr>
<td>CGR 214</td>
<td>Preparing for Electronic Prepress</td>
<td>3</td>
</tr>
<tr>
<td>CGR 222</td>
<td>Image Assembly and Platemaking</td>
<td>1</td>
</tr>
<tr>
<td>CGR 223</td>
<td>Lithographic and Flexographic Printing</td>
<td>3</td>
</tr>
<tr>
<td>CGR 332</td>
<td>Advanced Press</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ....................................... 16

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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. All courses must be completed with a C or better.

ADDITIONAL REQUIRED COURSES FOR A.A. DEGREE - COMPLETE 13 UNITS:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ART 125</td>
<td>Preparing for Electronic Prepress</td>
<td>1</td>
</tr>
<tr>
<td>CGR 211</td>
<td>Graphic Arts Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CGR 212</td>
<td>Electronic Prepress</td>
<td>3</td>
</tr>
<tr>
<td>CGR 221</td>
<td>Image Capture and Manipulation (Photoshop)</td>
<td>3</td>
</tr>
<tr>
<td>CGR 224</td>
<td>Illustrator and Electronic Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CGR 230</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>CGR 231</td>
<td>InDesign and Typography 1</td>
<td>3</td>
</tr>
<tr>
<td>CGR 232</td>
<td>Graphic Design Portfolio Development</td>
<td>1</td>
</tr>
<tr>
<td>CGR 330</td>
<td>Preparing for Electronic Prepress</td>
<td>3</td>
</tr>
<tr>
<td>CGR 331</td>
<td>Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>CGR 342</td>
<td>Designing for Clients</td>
<td>2</td>
</tr>
<tr>
<td>CGR 399A</td>
<td>Independent Study (with advisors approval)</td>
<td>1, 2, 3</td>
</tr>
</tbody>
</table>

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. 67) or the University Preparation Pathway (p. 65) 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ART 125</td>
<td>Preparing for Electronic Prepress</td>
<td>1</td>
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<td>CGR 211</td>
<td>Graphic Arts Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CGR 212</td>
<td>Electronic Prepress</td>
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<tr>
<td>CGR 221</td>
<td>Image Capture and Manipulation (Photoshop)</td>
<td>3</td>
</tr>
<tr>
<td>CGR 230</td>
<td>Graphic Design</td>
<td>3</td>
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<tr>
<td>CGR 231</td>
<td>InDesign and Typography 1</td>
<td>3</td>
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<tr>
<td>CGR 232</td>
<td>Graphic Design Portfolio Development</td>
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<tr>
<td>CGR 330</td>
<td>Preparing for Electronic Prepress</td>
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<td>CGR 342</td>
<td>Designing for Clients</td>
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</tr>
<tr>
<td>CGR 399A</td>
<td>Independent Study (with advisors approval)</td>
<td>1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR A.S. DEGREE .......................................................... 22

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 16 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CGR 201</td>
<td>Graphic Arts Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CGR 211</td>
<td>Image Capture and Manipulation (Photoshop)</td>
<td>3</td>
</tr>
<tr>
<td>CGR 212</td>
<td>Electronic Prepress</td>
<td>3</td>
</tr>
<tr>
<td>CGR 221</td>
<td>Illustrator and Electronic Publishing</td>
<td>3</td>
</tr>
<tr>
<td>CGR 230</td>
<td>Graphic Design</td>
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<tr>
<td>CGR 231</td>
<td>InDesign and Typography 1</td>
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<td>CGR 232</td>
<td>Graphic Design Portfolio Development</td>
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<td>CGR 330</td>
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<td>CGR 342</td>
<td>Designing for Clients</td>
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</tr>
<tr>
<td>CGR 399A</td>
<td>Independent Study (with advisors approval)</td>
<td>1, 2, 3</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ....................................... 37
Certificate of Achievement:
Presses 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 13 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CGR 201</td>
<td>3</td>
<td>Graphic Arts Fundamentals</td>
</tr>
<tr>
<td>CGR 213</td>
<td>3</td>
<td>Bindery</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>Lithographic and Flexographic Printing</td>
</tr>
<tr>
<td>CGR 332</td>
<td>3,4</td>
<td>Advanced Presses (Focus on Offset Presses)</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 13

PROGRAMS IN CAREER TECHNICAL EDUCATION

Printing and Lithography

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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
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<tbody>
<tr>
<td>MATH 20</td>
<td>5</td>
<td>Pre-Algebra</td>
</tr>
<tr>
<td>MATH 70</td>
<td>OR</td>
<td>Eligibility MATH 70 by MJC Assessment process</td>
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</table>

REQUIRED COURSES - COMPLETE 21 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR 201</td>
<td>3</td>
<td>Graphic Arts Fundamentals</td>
</tr>
<tr>
<td>CGR 213</td>
<td>3</td>
<td>Bindery</td>
</tr>
<tr>
<td>CGR 222</td>
<td>2</td>
<td>Electronic Prepress</td>
</tr>
<tr>
<td>CGR 223</td>
<td>1</td>
<td>Bindery</td>
</tr>
<tr>
<td>CGR 223</td>
<td>NP</td>
<td>Image Capture and Manipulation (Photoshop)</td>
</tr>
<tr>
<td>CGR 232</td>
<td>1,2</td>
<td>Lithographic and Flexographic Printing</td>
</tr>
<tr>
<td>CGR 224</td>
<td>1,2</td>
<td>Illustrator and Electronic Publishing</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 15 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>CGR 222</td>
<td>3</td>
<td>Image Assembly and Platemaking</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 16

Presses and Bindery

PROGRAM

A.A. Degree: Printing & Lithography

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the University Preparation Pathway (p. 65) 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.

MINIMUM UNITS IN A.A. MAJOR ............................................................... 36

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. 67) or the University Preparation Pathway (p. 65) 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.

MINIMUM UNITS IN A.S. MAJOR ............................................................. 46

PROGRAM

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>Bindery</td>
</tr>
<tr>
<td>CGR 223</td>
<td>1,2</td>
<td>Lithographic and Flexographic Printing</td>
</tr>
<tr>
<td>CGR 332</td>
<td>3,4</td>
<td>Advanced Presses</td>
</tr>
<tr>
<td>MACH 301</td>
<td>NP</td>
<td>Machine Shop 1</td>
</tr>
<tr>
<td>EL TEC 208</td>
<td>NP</td>
<td>The World of Electricity</td>
</tr>
<tr>
<td>EL TEC 209</td>
<td>NP</td>
<td>Troubleshooting Techniques</td>
</tr>
<tr>
<td>EL TEC 265</td>
<td>NP</td>
<td>Machine Shop 1</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................... 15

*Students completing two or more certificates will need to replace the second or third CGR 332 with a 399B Independent Study.
## General Plant Maintenance

Courses are intended for students that are interested in career opportunities in Plant or Facilities Maintenance as well as those currently working in the industry who need to update or upgrade their knowledge and skills.

**Certificate of Achievement:**
**General Plant Maintenance**

- To earn a Certificate of Achievement, the student must complete the required courses and complete at least 3 units from the elective courses. Each course must be completed with a grade C or better.

<table>
<thead>
<tr>
<th>REQUIRED COURSES – COMPLETE 21 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 115 [1,2] Introduction to Technical Industries ........................................... 1</td>
</tr>
<tr>
<td>INTEC 203 [1] Industrial Mechanical/Pneumatic Components ...................................... 3</td>
</tr>
<tr>
<td>INTEC 261 [1] Introduction to Plant Maintenance .................................................... 3</td>
</tr>
<tr>
<td>INTEC 367 [2] Plumbing Principles and Methods ..................................................... 2</td>
</tr>
<tr>
<td>INTEC 306 [4] Intro to Occupational Safety &amp; Health ............................................... 3</td>
</tr>
<tr>
<td>ENGT 375 [3] Construction Blueprint Reading ....................................................... 3</td>
</tr>
</tbody>
</table>

### ELECTIVE COURSES – SELECT AT LEAST 3

| INTEC 208 [NP] World of Electricity & Electronics ..................................................... 3 |
| INTEC 223 [NP] Industrial Elec. Comp. & Control Dev. ............................................. 3 |
| INTEC 226 [NP] Motors and Motor Controls ............................................................. 3 |
| INTEC 262 [1,3] Hydraulics/Pneumatics .................................................................. 2 |
| INTEC 362 [1,3] Industrial Refrigeration Systems ..................................................... 2 |

**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 all the required courses and the electives as indicated. Completing the 21 required units is the minimum units requirement.

**MINIMUM UNITS REQUIRED IN A.A. MAJOR ................................................ 21**

### A.S. Degree: General Plant Maintenance

To earn an Associate in Science Degree in this major, the student must complete all the required courses and the electives as indicated. Completing the 26 required units is the minimum units requirement.

**MINIMUM UNITS REQUIRED IN A.S. MAJOR ................................................ 30**

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## Industrial Electronics

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 26½ UNITS

| ELTEC 205 [1] Electronics Fabrication & Assembly Techniques .................................. 3 |
| ELTEC 208 [1] The World of Electricity and Electronics ........................................... 3 |
| ELTEC 221 [3] Instrumentation Devices and Systems .............................................. 3 |
| ELTEC 222 [3] Industrial Electrical Components & Control Devices ....................... 3 |
| ELTEC 229 [3,4] Commercial and Industrial Wiring .............................................. 3½ |
| ELTEC 252 [2] Introduction to Programmable Logic Controllers ........................... 2 |
| ELTEC 265 [1] Troubleshooting ............................................................................. 1 |

### ELECTIVE COURSES – COMPLETE 9 UNITS

| ELTEC 214 [2,3,4] Microprocessor Programming and Interfacing ......................... 4 |
| INTEC 202 [NP] Fundamentals of Industrial Technology ......................................... 2 |
| INTEC 203 [1] Industrial Mechanical/Pneumatic Components ............................. 3 |
| CMPET 206 [2,3,4] Personal Computer Assembling, Upgrading, and Repairing ....... 3 |

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT..................................... 35½**

### A.S. Degree: Industrial Electronics

To earn an Associate in Science Degree in this major, the student must complete all the required courses and the electives as indicated. Completing the 26½ required units is the minimum units requirement.

**REQUIRED COURSES – COMPLETE 26½ UNITS**

| ELTEC 205 [1] Electronics Fabrication & Assembly Techniques ................................ 3 |
| ELTEC 208 [1] The World of Electricity and Electronics ........................................... 3 |
| ELTEC 221 [3] Instrumentation Devices and Systems .............................................. 3 |
ELTEC 223 [2] Industrial Electrical Components & Control Devices 3
ELTEC 229 [4] Commercial & Industrial Wiring 3½
ELTEC 232 [2] Introduction to Programmable Logic Controllers 2
ELTEC 265 [1] Troubleshooting 1

**ELECTIVE COURSES - COMPLETE 4 UNITS**

ELTEC 214 [2,3,4] Introduction to Microprocessors & Digital Systems 4
INTEC 202 [NP] Fundamentals of Industrial Technology 2
INTEC 203 [1] Industrial Mechanical/Pneumatic Components 3

**MINIMUM UNITS IN A.S. MAJOR .............................................................. 30**

**INDUSTRIAL TECHNOLOGY Electrician**

Courses are intended for students who 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.

**Certificate of Achievement: Industrial Technology - Electrician**

- To earn a Certificate of Achievement, the student must complete the 24 required units. Each course must be completed with grade C or better.

**REQUIRED COURSES: COMPLETE 24 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>Fundamentals of Industrial Technology</td>
<td>2</td>
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<tr>
<td>INTEC 203</td>
<td>Industrial Mechanical/Pneumatic Components</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>Industrial Electric Component and Control Devices</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 226</td>
<td>Motors and Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>Introduction to Plant Maintenance</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 361</td>
<td>Industrial Refrigeraion Systems</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Arc and Gas Welding</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ...................................... 24**

**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 grade C or better.

**REQUIRED COURSES: COMPLETE 24 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 202</td>
<td>Fundamentals of Industrial Technology</td>
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<td>INTEC 203</td>
<td>Industrial Mechanical/Pneumatic Components</td>
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<tr>
<td>INTEC 223</td>
<td>Industrial Electric Component and Control Devices</td>
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<td>INTEC 226</td>
<td>Motors and Motor Controls</td>
<td>3</td>
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<td>INTEC 261</td>
<td>Introduction to Plant Maintenance</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 361</td>
<td>Industrial Refrigeraion Systems</td>
<td>2</td>
</tr>
<tr>
<td>INTEC 367</td>
<td>Plumbing Principles and Methods</td>
<td>2</td>
</tr>
<tr>
<td>WELD 200</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 - 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. 67) or the University Preparation Pathway (p. 65) which include completion of 23 required units, and at least 7 elective units. All courses must be completed with grade C or better.

**REQUIRED COURSES: COMPLETE 23½ UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
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<td>INTEC 230</td>
<td>Blueprint Reading</td>
<td>1</td>
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<td>ELTEC 320</td>
<td>Electrical Safety</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>Industrial Electric Component and Control Devices</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 225</td>
<td>Principles of Electrical Wiring</td>
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</tr>
<tr>
<td>INTEC 226</td>
<td>Motors, Controls, and Controllers</td>
<td>3</td>
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<tr>
<td>INTEC 229</td>
<td>Commercial and Industrial Wiring</td>
<td>3½</td>
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<tr>
<td>INTEC 248</td>
<td>Electrical Codes &amp; Ordinances</td>
<td>3</td>
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<tr>
<td>INTEC 261</td>
<td>Introduction to Plant Maintenance</td>
<td>3</td>
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**ELECTIVE COURSES: COMPLETE AT LEAST 7 UNITS**

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<th>Title</th>
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</thead>
<tbody>
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<td>ELTEC 212</td>
<td>Digital Principles and Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>Introduction to Programmable Logic Controllers</td>
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</tr>
<tr>
<td>HE 100</td>
<td>Standard First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 221</td>
<td>Instrumentation Devices and Systems</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>Introduction to Occupational Safety and Health</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 366</td>
<td>Heating, Ventilation, Air Conditioning, and Refrigeration</td>
<td>2</td>
</tr>
</tbody>
</table>

**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. 67) or the University Preparation Pathway (p. 65) 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.

**ELECTIVE COURSES - COMPLETE 6 UNITS**

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>INTEC 115</td>
<td>Introduction to Technical Industries</td>
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</tr>
<tr>
<td>INTEC 201</td>
<td>Intro to Industrial Operations</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 205</td>
<td>Principles of Quality Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>World of Electricity &amp; Electronics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 262</td>
<td>Hydraulics/Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 350</td>
<td>Industrial Technology Internship</td>
<td>2</td>
</tr>
<tr>
<td>MACH 211D</td>
<td>Machine Tool Technology 1</td>
<td>4</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS REQUIRED IN A.S. MAJOR .................................................. 30**
INDUSTRIAL TECHNOLOGY Systems

Courses are intended for students that 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>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 208</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 222</td>
<td>Instrumentation Devices &amp; Systems</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>Instrumental Electronic Devices &amp; Control Systems</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 226</td>
<td>Motors and Motor Controls</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>Electrical Codes &amp; Ordnance</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 249</td>
<td>Analysis of Electrical Codes</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>Introduction to Plant Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 306</td>
<td>Intro to Occupational Safety &amp; Health</td>
<td>1</td>
</tr>
<tr>
<td>ELTEC 232</td>
<td>Intro to Program: Logic Controllers</td>
<td>1</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 - Systems

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the required units, and at least 4 elective units. All courses must be completed with a C or better.

MINIMUM UNITS IN A.S. MAJOR | 30

INTEC 207 [1] Introduction to Technical Industries | 1
INTEC 211 [1] Energy Systems | 1
INTEC 220 [1] Principles of Industrial Controls | 1
INTEC 223 [1] Technical Electronics & Controls | 1
INTEC 307 [1] Principles of Industrial Control Systems | 1
INTEC 308 [1] Employment Skills | 1

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 Code</th>
<th>Course 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>Energy Systems</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 202</td>
<td>Fundamentals of Industrial Technology</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>Industrial Mechanical/Pneumatic Components</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 204</td>
<td>Principles of Quality Control Systems</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 223</td>
<td>Industrial Electric Comp. &amp; Control Dev.</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 301</td>
<td>Employment Skills</td>
<td>1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – COMPLETE AT LEAST 12 UNITS FOR CERTIFICATE

Choose any other INTEC courses | 12

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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 218</td>
<td>Intro to CNC Lathe Programming</td>
<td>1</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>1</td>
</tr>
<tr>
<td>MACH 222</td>
<td>CNC Machine Operations</td>
<td>1</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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 218</td>
<td>Intro to CNC Lathe Programming</td>
<td>1</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>1</td>
</tr>
<tr>
<td>MACH 222</td>
<td>CNC Machine Operations</td>
<td>1</td>
</tr>
</tbody>
</table>

ELECTIVE COURSES – COMPLETE 2 UNITS

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

Certificate of Achievement: 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 211D</td>
<td>Machine Tool Technology</td>
<td>1</td>
</tr>
<tr>
<td>MACH 212D</td>
<td>Machine Tool Technology</td>
<td>1</td>
</tr>
<tr>
<td>MACH 213C</td>
<td>Machine Tool Technology</td>
<td>1</td>
</tr>
<tr>
<td>MACH 395A/B/C</td>
<td>Advanced Machine Tool Technology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Arc &amp; Gas Welding</td>
<td>1</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
Math 70 eligibility through assessment process

REQUIRED COURSES - COMPLETE 27 UNITS

WELD 200 [1] Arc and Gas Welding ................................................. 3
MACH 219 [2] Introduction to CNC Mill Programming .............. 2
Complete 2 units from the following:
MACH 395ABC [1-3] Advanced Machine Tool Technology Laboratory . 1-3
OR
MACH 310 [3] Advanced Topics in Machining ......................... 2
MACH 218 [3] Intro to CNC Lathe Programming .................... 2

Complete 2 units:
INTEC 376 (NP) Mechanical Blue-Print Reading ..................... 2

ELECTIVE COURSES - COMPLETE 3 UNITS

WELD 204 [2,3] Gas Metal Arc Welding ........................................... 3
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 Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. All courses must be completed with a grade C or better.

MINIMUM UNITS IN A.S. MAJOR ......................................................... 30

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 24½ UNITS

INTEC 232 [4] Intro to Programm Logic Controllers ............... 2
INTEC 265 [NP] Troubleshooting Techniques .......................... 1
INTEC 261 [3] Introduction to Plant Maintenance ......................... 3
INTEC 203 [1] Industrial Mechanical/Pneumatic Components .... 3
INTEC 208 [1] World of Electricity & Electronics ..................... 3
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ............................................. 24½

A.A. 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below. 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 203 [1] Industrial Mechanical/Pneumatic Components .... 3
INTEC 223 [1] Industrial Elec. Comp. & Control Dev................. 3
INTEC 229 [3,4] Commercial and Industrial Wiring ................. 3½
INTEC 226 [2] Motors and Motor Controls ................................. 3
INTEC 261 [3] Introduction to Plant Maintenance ......................... 3
ELTEC 232 [4] Intro to Program. Logic Controllers .................. 2

MINIMUM UNITS IN A.A. MAJOR ......................................................... 21½
A.S. Degree: **Maintenance Electrician**

- To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the 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>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 203</td>
<td>Industrial Mechanical/Pneumatic Components</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 208</td>
<td>World of Electricity &amp; Electronics</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 229</td>
<td>Commercial and Industrial Wiring</td>
<td>3½</td>
</tr>
<tr>
<td>INTEC 226</td>
<td>Motors and Motor Controls</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 248</td>
<td>Electrical Codes &amp; Ordinances</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 261</td>
<td>Introduction to Plant Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>ELTE 232</td>
<td>Intro to Program. Logic Controllers</td>
<td>2</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES — COMPLETE AT LEAST 5 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>INTEC 115</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>INTEC 221</td>
<td>Instrumentation Devices &amp; Systems</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>ELTE 232</td>
<td>Intro to Program. Logic Controllers</td>
<td>2</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR A.S. MAJOR ................................................................. 30**

**Maintenance Machinist PROGRAM**

### Skills Recognition Award:

#### Maintenance Machinist 1

- To earn a Skills Recognition Award, the 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 are 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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 301</td>
<td>Machine Shop 1</td>
<td>3</td>
</tr>
<tr>
<td>MACH 302</td>
<td>Machine Shop 2</td>
<td>3</td>
</tr>
<tr>
<td>WELD 200</td>
<td>Arc &amp; Gas Welding</td>
<td>3</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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>Elementary Algebra</td>
<td>4</td>
</tr>
</tbody>
</table>

* Math 70 eligibility through assessment process

**REQUIRED COURSES — COMPLETE 18 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACH 301</td>
<td>Machine Shop 1</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES — COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 306</td>
<td>Intro to Occupational Safety and Health</td>
<td>3 OR</td>
</tr>
<tr>
<td>WELD 204</td>
<td>Gas Metal Arc Welding</td>
<td>3 OR</td>
</tr>
<tr>
<td>WELD 306</td>
<td>Gas Tungsten Arc Welding</td>
<td>3</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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 20</td>
<td>Pre-Algebra</td>
<td>5 OR</td>
</tr>
</tbody>
</table>

* 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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>Arc &amp; Gas Welding</td>
<td>3</td>
</tr>
<tr>
<td>SM 331</td>
<td>Sheet Metal &amp; Installation 1</td>
<td>3</td>
</tr>
<tr>
<td>WELD 204</td>
<td>Gas Metal &amp; Flux Core Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 300</td>
<td>Intermediate Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 325</td>
<td>Design &amp; Fabrication Process</td>
<td>3</td>
</tr>
<tr>
<td>WELD 399</td>
<td>Independent Study</td>
<td>3</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>Arc and Gas Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 300</td>
<td>Intermediate Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 204</td>
<td>Gas Metal Arc (MIG) and Flux Core Welding</td>
<td>3</td>
</tr>
<tr>
<td>WELD 399A</td>
<td>Independent Study</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD ............................................. 10**
Skills Recognition Award: Shielded 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 8 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc and Gas Welding</td>
</tr>
<tr>
<td>WELD 300</td>
<td>[2]</td>
<td>Intermediate Welding</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD**.......................... **8**

Skills Recognition Award: Gas Tungsten 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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc and Gas Welding</td>
</tr>
<tr>
<td>WELD 300</td>
<td>[2]</td>
<td>Intermediate Welding</td>
</tr>
<tr>
<td>WELD 399A</td>
<td>[2,3]</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc and Gas Welding</td>
</tr>
<tr>
<td>WELD 300</td>
<td>[2]</td>
<td>Intermediate Welding</td>
</tr>
<tr>
<td>WELD 399A</td>
<td>[2,3,4]</td>
<td>Independent Study/Special Problems</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc and Gas Welding</td>
</tr>
<tr>
<td>SM 331</td>
<td>[1]</td>
<td>Sheet Metal &amp; Installation</td>
</tr>
<tr>
<td>SM 332</td>
<td>[2]</td>
<td>Sheet Metal &amp; Installation</td>
</tr>
<tr>
<td>WELD 399</td>
<td>[2]</td>
<td>Independent Study</td>
</tr>
</tbody>
</table>

**TOTAL UNITS FOR SKILLS RECOGNITION AWARD**.......................... **10**

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 below.

**REQUIRED COURSES — COMPLETE 21 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc and Gas Welding</td>
</tr>
<tr>
<td>SM 331</td>
<td>[1]</td>
<td>Sheet Metal &amp; Installation</td>
</tr>
<tr>
<td>WELD 204</td>
<td>[2]</td>
<td>Gas Metal &amp; Flux Core Welding</td>
</tr>
<tr>
<td>WELD 300</td>
<td>[2]</td>
<td>Intermediate Welding</td>
</tr>
<tr>
<td>WELD 325</td>
<td>[3]</td>
<td>Design &amp; Fabrication Process</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.A. MAJOR**................................................. **21**

A.S. Degree: Welding

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED COURSES — COMPLETE 30 UNITS**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 306</td>
<td>[2,4]</td>
<td>Introduction Occupation Safety and Health</td>
</tr>
<tr>
<td>MACH 211C</td>
<td>[NP]</td>
<td>Machine Tool Technology</td>
</tr>
<tr>
<td>SM 331</td>
<td>[2]</td>
<td>Sheet Metal &amp; Installation</td>
</tr>
<tr>
<td>WELD 200</td>
<td>[1]</td>
<td>Arc &amp; Gas Welding</td>
</tr>
<tr>
<td>WELD 204</td>
<td>[2]</td>
<td>Gas Metal Arc (MIG) Flux Core Arc (FCAW)</td>
</tr>
<tr>
<td>WELD 300</td>
<td>[2]</td>
<td>Intermediate Welding</td>
</tr>
<tr>
<td>WELD 325</td>
<td>[3]</td>
<td>Design and Fabrication Process</td>
</tr>
<tr>
<td>WELD 399A</td>
<td>[2,3,4]</td>
<td>Independent Study/Special Problems</td>
</tr>
<tr>
<td>WELD 399B</td>
<td>[2,3,4]</td>
<td>Independent Study/Special Problems</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.S. MAJOR**.................................................. **30**
The mission of the Child Development Department at Modesto Junior College is to enhance the intellectual, cultural, and economic strength of our diverse community by supporting and encouraging all students in their pursuit of lifelong learning and success, and in their abilities to strengthen children and families in the community.

The Child Development program offers both theoretical and practical courses, which focus on the growth and development of all children from conception to late adolescence. Students use this knowledge to create culturally relevant, inclusive, age-appropriate, anti-bias environments that promote optimum care and learning opportunities.

Learning to respond to the needs of children, families, staff, and agencies builds and nurtures children in becoming competent members of the larger diverse and global community.

Coursework prepares students for a wide variety of careers in direct services for children and support services for families in licensed, state, federal, private and/or non-profit programs serving infants, children, and adolescents.

Required coursework in the Child Development program emphasizes educational ladders leading to certificates, 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), 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 Certificate of Achievement. 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.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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

#### REQUIRED COURSES - COMPLETE 21 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDDV 101</td>
<td>Principles and Practices of Teaching Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 103</td>
<td>Child Growth and Development</td>
<td>3 OR</td>
</tr>
<tr>
<td>CLDDV 104</td>
<td>Child Growth and Development - Conception</td>
<td>2 AND</td>
</tr>
<tr>
<td>CLDDV 105</td>
<td>Child Growth and Development - Late Childhood - Adolescence</td>
<td>2</td>
</tr>
<tr>
<td>CLDDV 107</td>
<td>Introduction to Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 109</td>
<td>Child-Family-Community</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 111</td>
<td>Health, Safety, and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 121</td>
<td>Guidance of Young Children</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 125</td>
<td>Infant and Toddler Development</td>
<td>3</td>
</tr>
</tbody>
</table>

#### LAB PRACTICUM - COMPLETE A MINIMUM OF 3 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CLDDV 126</td>
<td>Inclusion Special Needs Practicum</td>
<td>2-5 OR</td>
</tr>
<tr>
<td>CLDDV 127</td>
<td>Infant and Toddler Practicum</td>
<td>2-5 OR</td>
</tr>
<tr>
<td>CLDDV 128</td>
<td>Preschool Practicum</td>
<td>2-5</td>
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<tr>
<td>CLDDV 163</td>
<td>Working with Children with Special Needs</td>
<td>3</td>
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<tr>
<td>CLDDV 167</td>
<td>Observation and Assessment</td>
<td>3</td>
</tr>
<tr>
<td>CLDDV 262</td>
<td>Diversity in Educational Settings</td>
<td>3</td>
</tr>
</tbody>
</table>

#### MINIMUM UNITS IN A.S. MAJOR

33

### Certificates in Child Development

The Certificates 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.
Certificate of Achievement: **Associate Teacher**

**REQUIRED COURSES - COMPLETE A MINIMUM OF 12 UNITS**

**CHILD GROWTH AND DEVELOPMENT:**
- CLDDV 125 [2] Infant and Toddler Development ............................................... 3

**LAB PRACTICUM - COMPLETE A MINIMUM OF 3 UNITS**
- CLDDV 167 [4] Observation and Assessment .................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 12-13

Certificate of Achievement: **Teacher**

**REQUIRED COURSES - COMPLETE A MINIMUM OF 15 UNITS**

**CHILD GROWTH AND DEVELOPMENT:**
- CLDDV 105 [1] Child Growth and Development - Late Childhood - Adolescence .. 2
- CLDDV 107 [1] Introduction to Curriculum ..................................................... 3
- CLDDV 127 [3] Infant and Toddler Practicum .................................................. 3

**ELECTIVES - COMPLETE 9 UNITS:**
- CLDDV 126 [2] Infant and Toddler Development ............................................. 3
- CLDDV 167 [4] Observation and Assessment .................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 24-30

Certificate of Achievement: **Master Teacher**

**REQUIRED COURSES - COMPLETE A MINIMUM OF 17 UNITS**

**CHILD GROWTH AND DEVELOPMENT:**
- CLDDV 105 [1] Child Growth and Development - Late Childhood - Adolescence .. 2
- CLDDV 107 [1] Introduction to Curriculum ..................................................... 3
- CLDDV 150 [3] Administration of Children's Programs ................................... 3

**ELECTIVES - COMPLETE 9 UNITS:**
- CLDDV 126 [2] Infant and Toddler Development ............................................. 3
- CLDDV 167 [4] Observation and Assessment .................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 32-40

Certificate of Achievement: **Site Supervisor**

**REQUIRED COURSES - COMPLETE A MINIMUM OF 23 UNITS**

**CHILD GROWTH AND DEVELOPMENT:**
- CLDDV 105 [1] Child Growth and Development - Late Childhood - Adolescence .. 2
- CLDDV 107 [1] Introduction to Curriculum ..................................................... 3
- CLDDV 150 [3] Administration of Children's Programs ................................... 3

**ELECTIVES - COMPLETE 9 UNITS:**
- CLDDV 126 [2] Infant and Toddler Development ............................................. 3
- CLDDV 167 [4] Observation and Assessment .................................................. 3

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 32-40

Certificate of Achievement: **Early Interventionist**

**REQUIRED COURSES - COMPLETE A MINIMUM OF 32 UNITS**

**CHILD GROWTH AND DEVELOPMENT:**
- CLDDV 105 [1] Child Growth and Development - Late Childhood - Adolescence .. 2

**TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT** ........................................ 32-40
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 [1], [2], [3], or [4] for each award.

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>CERTIFICATES OF ACHIEVEMENT</th>
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<tbody>
<tr>
<td>AS Degree</td>
<td>Associate Teacher</td>
</tr>
<tr>
<td>101</td>
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<td>126BCD OR 1278-E OR 1288-E</td>
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</tr>
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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 Interventionist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Development</td>
<td>16 General Education Units</td>
<td>16 General Education Units</td>
<td>16 General Education Units + 16 Early Childhood/Child Development units (including required course) + 16 General Education units</td>
<td>100 days at 3+ hours per day within 4 years including 100 days of supervising adults</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Additional Coursework

<table>
<thead>
<tr>
<th>Hours*</th>
<th>100 days at 3+ hours per day within 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>175 days at 3+ hours per day within 2 years</td>
</tr>
<tr>
<td></td>
<td>350 days at 3+ hours per day within 4 years including 100 days of supervising adults</td>
</tr>
</tbody>
</table>

+6-UNIT OPTIONS (required for AS Degree and Master Teacher Certificate): 3 units of the 6-unit option must be a Child Development course.

Music

<table>
<thead>
<tr>
<th>Music</th>
<th>Administration</th>
<th>Creative Activities</th>
<th>Early Intervention</th>
<th>Families and Culture</th>
<th>Family Child Care</th>
<th>Infant/Toddler</th>
<th>Literacy and Literature</th>
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<tbody>
<tr>
<td>(CLDDV) 293</td>
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<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
<td>162</td>
</tr>
</tbody>
</table>

Numbers in brackets, i.e., [1], [2], [3] or [4] refer to the semesters in which the student should enroll in a given course.

† Students may design their own Master Teacher specializations; however, all specializations for a permit are subject to approval by the California Commission on Teacher Credentialing.
PROGRAMS IN FAMILY & CONSUMER SCIENCES

LAB PRACTICUM - COMPLETE A MINIMUM OF 3 UNITS

- CLODV 109 (1) Child-Family-Community .................................................. 3
- CLODV 111 (2) Health, Safety, and Nutrition ................................................. 3
- CLODV 125 (2) Infant and Toddler Development ........................................... 3
- CLODV 154 (3) Adult Relationships & Mentoring in Schools .......................... 2
- CLODV 160 (3) Atypical Development .......................................................... 3
- CLODV 163 (4) Working with Children with Special Needs .............................. 3
- CLODV 165 (4) Children at-Risk ................................................................. 3
- CLODV 167 (4) Observation and Assessment .................................................. 3
- CLODV 262 (4) Diversity in Educational Settings ............................................. 3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 32-40

- Completing the Early Interventionist Assistant certificate along with an AS degree in Child Development qualifies a student to work at the Early Intervention Assistant II level of the California Early Start Personnel Model. The California Intergency Coordinating Council has recommended the California Early Start Personnel Model for the professional field of early intervention. The California Intergency Coordinating Council is the statewide advisory body for California’s Early Start Program.

LAB PRACTICUM - COMPLETE A MINIMUM OF 3 UNITS

- CLODV 126 (4) Inclusion Special Needs Practicum ........................................ 2-5 OR
- CLODV 127 (3) Infant and Toddler Practicum .................................................. 2-5 OR
- CLODV 128 (3) Preschool Practicum .............................................................. 2-5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT ........................................ 28

- In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Culinary Arts will be able to:
  1. Perform mathematical computations of recipe calculations, scaling, and conversions, as well as basic record keeping relating to the food service industry.
  2. Demonstrate proper sanitation procedures and food handling techniques for use in the food service industry.
  3. Demonstrate proper use and handling of several types of knives, tools, and equipment for a variety of food products and preparations.
  4. Match and select the appropriate ingredients, cooking methods, and preparation techniques to achieve the desired finished product and presentation.
  5. Demonstrate the ability to apply basic knowledge of baking fundamentals and techniques to the preparation of desserts, pastries, breads, and other baked goods.
  6. Demonstrate cost control procedures for forecasting income, costs, and profitability through operating budgets, food, labor, and other expenses; and for calculating recipe costing and selling price of menu items.
  7. Use computer technology for various aspects of management for the food service industry.
  8. Use the critical thinking skills necessary for planning and organization of a station, production management, and assessing and correcting problems within food production.

Certificate of Achievement: Culinary Arts

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Culinary Arts will be able to:

1. Perform mathematical computations of recipe calculations, scaling, and conversions, as well as basic record keeping relating to the food service industry.
2. Demonstrate proper sanitation procedures and food handling techniques for use in the food service industry.
3. Demonstrate proper use and handling of several types of knives, tools, and equipment for a variety of food products and preparations.
4. Match and select the appropriate ingredients, cooking methods, and preparation techniques to achieve the desired finished product and presentation.
5. Demonstrate the ability to apply basic knowledge of baking fundamentals and techniques to the preparation of desserts, pastries, breads, and other baked goods.
6. Demonstrate cost control procedures for forecasting income, costs, and profitability through operating budgets, food, labor, and other expenses; and for calculating recipe costing and selling price of menu items.
7. Use computer technology for various aspects of management for the food service industry.
8. Use the critical thinking skills necessary for planning and organization of a station, production management, and assessing and correcting problems within food production.

CERTIFICATE REQUIREMENTS

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.

REQUIREDS 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

The Culinary Arts 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 accrete 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 (C.I.D.) 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

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 COURSES - COMPLETE 14 UNITS

- CLART 301 [NP] Culinary Academy 1 .............................................................. 14

TOTAL UNITS FOR SKILLS RECOGNITION AWARD ........................................ 14

Certificate of Achievement: Culinary Arts

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.

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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

ELECTIVE COURSES - COMPLETE 2 UNITS

- FDNTR 219 [NP] Nutrition .............................................................................. 3
- FDNTR 351 [NP] Practical Nutrition ................................................................. 3
- FDSER 328 [NP] Catering ............................................................................... 2

MINIMUM UNITS FOR MAJOR ........................................................................... 30
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.

**REQUICKED COURSES - COMPLETE 20 UNITS.**

- INTDS 100 [NP] Careers in Design .................................................. 2
- INTDS 120 [NP] Color Theory and Application ................................. 3
- ART 124 [NP] Color and Design ...................................................... 3
- INTDS 150 [NP] History of Interiors /Decorative Arts .......................... 3
- INTDS 155 [NP] History of Interiors /Decorative Arts .......................... 3
- INTDS 200 [NP] Interior Design Fundamentals ................................. 3
- INTDS 210 [NP] Introduction to Sales and Marketing for Design ....... 3
- INTDS 270 [NP] Business and Professional Practices ........................ 3
- INTDS 220 [NP] Interior Finishes and Construction Materials ........... 3
- INTDS 230 [NP] Drafting for Interiors ............................................... 3
- INTDS 250 [NP] CAD/D for interiors ................................................ 3

**ELECTIVE COURSES - COMPLETE 5 UNITS.**

- INTDS 120 [NP] Color Theory and Application* ............................... 3
- INTDS 130 [NP] Fabrics for Interiors ................................................ 3
- INTDS 140 [NP] Rendering and Rapid Visualization .......................... 3
- INTDS 145 [NP] Fundamentals of Lighting Design ............................ 3
- INTDS 150 [NP] History of Interiors and Decorative Arts 1* ............... 3
- INTDS 155 [NP] History of Interiors and Decorative Arts 2* ............... 3
- INTDS 160 [NP] Asian Design and Decorative Arts ............................ 3
- INTDS 180 [NP] Universal Design for Health Safety and Welfare ....... 3
- INTDS 190 [NP] Sustainable and Green Design ............................... 3
- INTDS 210 [NP] Introduction to Sales and Marketing for Design* ....... 3
- INTDS 215 [NP] Interior Design Studio 1 ......................................... 2
- INTDS 220 [NP] Drafting for Interiors* ............................................. 3
- INTDS 235 [NP] Space Planning ..................................................... 3
- INTDS 245 [NP] Kitchen and Bath Design ......................................... 3
- INTDS 250 [NP] CAD/D for Interiors .............................................. 3
- INTDS 270 [NP] Business and Professional Practices* ....................... 3
- INTDS 298 [NP] Special Topics in Design ......................................... 3
- INTDS 398 [NP] Community Design Project ..................................... 3
- ART 120 [NP] Basic Drawing .......................................................... 3
- ART 124 [NP] Color and Design* ................................................... 3
- ART 150 [NP] Gallery Operation and Management .......................... 3
- BUSAD 210 [NP] Business Communication ..................................... 3
- BUSAD 218 [NP] Business Law ...................................................... 4
- BUSAD 249 [NP] Business Internship ............................................. 4
- ENGTC 210 [NP] Introduction to Computer Assisted Drafting ........... 1

*INTDS ELECTIVE COURSES:

- INTDS 120
- INTDS 210
- ART 120
- INTDS 130
- INTDS 215
- ART 124
- INTDS 140
- INTDS 230
- ART 150
- INTDS 145
- INTDS 235
- BUSAD 210
- INTDS 150
- INTDS 245
- BUSAD 218
- INTDS 155
- INTDS 250
- BUSAD 249
- INTDS 160
- INTDS 270
- CMPGR 215
- INTDS 180
- INTDS 298
- ENGTC 210
- INTDS 190
- INTDS 398

**REQUIRED COURSES - COMPLETE 5 UNITS.**

- ART 124 [NP] Introduction to Sales and Marketing for Design ....... 3
- INTDS 270 [NP] Business and Professional Practices ........................ 3
- INTDS 250 [NP] CAD/D for interiors .............................................. 3
- ART 124 [NP] Introduction to Sales and Marketing for Design ....... 3
- INTDS 270 [NP] Business and Professional Practices ........................ 3
- INTDS 250 [NP] CAD/D for interiors .............................................. 3

**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. 67) or the University Preparation Pathway (p. 65) 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**

**MINIMUM 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. 67) or the University Preparation Pathway (p. 65) 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**
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 screen 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

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in English will be able to:

1. Read, comprehend, and evaluate a variety of texts and various forms of media.
2. Write clear, organized work in a style suited for its purpose and audience.
3. Create professional-looking written work that shows careful editing and properly document sources.
4. Demonstrate an appreciation of literature by reading and analyzing works from various genres, periods, and cultures.

DEGREE REQUIREMENTS

To earn an Associate in Arts Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 9 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>3</td>
</tr>
</tbody>
</table>

MINIMUM UNITS IN A.A. MAJOR ............................................................... 20

ELECTIVE COURSES - COMPLETE 11 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 105</td>
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</tr>
<tr>
<td>ENGL 106</td>
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<td>ENGL 108</td>
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<td>ENGL 114</td>
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<td>ENGL 131</td>
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<td>ENGL 174</td>
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<td>ENGL 175</td>
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<td>ENGL 176</td>
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<td>ENGL 178</td>
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<tr>
<td>ENGL 179</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 183</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 184</td>
<td>2</td>
</tr>
<tr>
<td>ENGL 198</td>
<td>3</td>
</tr>
</tbody>
</table>

Other Instructional Programs:

- English as a Second Language (ESL)
- Reading
- Sign Language

PROGRAMS IN LITERATURE & LANGUAGE ARTS
## Shakespeare Academy PROGRAM

**A.A. Degree: University Preparation, Emphasis in Language Studies (p. 171)**

### 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>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 163</td>
<td>[2]</td>
<td>Introduction to Shakespeare</td>
</tr>
<tr>
<td>THTR 100</td>
<td>[1]</td>
<td>Introduction to Theatre Arts</td>
</tr>
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</table>

**ELECTIVE COURSES - COMPLETE 11 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</tr>
</thead>
<tbody>
<tr>
<td>HUMAN 101</td>
<td>[1]</td>
<td>Introduction to the Humanities</td>
</tr>
<tr>
<td>ENGL 102</td>
<td>[1]</td>
<td>Advanced Composition &amp; Introduction to Literature</td>
</tr>
<tr>
<td>ENGL 116</td>
<td>[3]</td>
<td>Introduction to Drama</td>
</tr>
<tr>
<td>ENGL 137</td>
<td>[4]</td>
<td>Survey of English Lit to 18th Century</td>
</tr>
<tr>
<td>THTR 120</td>
<td>[2]</td>
<td>Oral Reading and Interpretation</td>
</tr>
<tr>
<td>THTR 161</td>
<td>[2]</td>
<td>Intermediate Acting</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS FOR SKILLS RECOGNITION AWARD** ........................................... 17

## Language Studies PROGRAM

**A.A. Degree: University Preparation, Emphasis in Language Studies (p. 171)**

### 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>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 163</td>
<td>[2]</td>
<td>Introduction to Shakespeare</td>
</tr>
<tr>
<td>THTR 100</td>
<td>[1]</td>
<td>Introduction to Theatre Arts</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 11 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
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</tr>
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<tbody>
<tr>
<td>HUMAN 101</td>
<td>[1]</td>
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<tr>
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<tr>
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<td>Introduction to Drama</td>
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<tr>
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<td>[4]</td>
<td>Survey of English Lit to 18th Century</td>
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<tr>
<td>THTR 120</td>
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<td>Oral Reading and Interpretation</td>
</tr>
<tr>
<td>THTR 161</td>
<td>[2]</td>
<td>Intermediate Acting</td>
</tr>
</tbody>
</table>

**MINIMUM 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 firsthand 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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

**REQUIRED PREPARATORY COURSES – COMPLETE 8 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 102</td>
<td>[1]</td>
<td>Spanish 2</td>
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<tr>
<td>SPAN 103</td>
<td>[1]</td>
<td>Spanish 3</td>
</tr>
<tr>
<td>SPAN 104</td>
<td>[1]</td>
<td>Spanish 4</td>
</tr>
<tr>
<td>SPAN 109</td>
<td>[2]</td>
<td>Spanish for Spanish Speakers 1</td>
</tr>
<tr>
<td>SPAN 110</td>
<td>(NP)</td>
<td>Spanish for Spanish Speakers 2</td>
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</table>

**REQUIRED COURSES – COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 112</td>
<td>(NP)</td>
<td>Intro to Chicano/a Literature</td>
</tr>
<tr>
<td>SPAN 173</td>
<td>(NP)</td>
<td>Survey of Latin American Literature</td>
</tr>
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</table>

**ELECTIVE COURSES – COMPLETE 6 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 172</td>
<td>(NP)</td>
<td>Introduction to Chicano/a Literature</td>
</tr>
<tr>
<td>ENGL 173</td>
<td>(NP)</td>
<td>Introduction to Latin American Literature</td>
</tr>
<tr>
<td>HIST 125</td>
<td>(NP)</td>
<td>History of Mexico</td>
</tr>
<tr>
<td>HIST 145</td>
<td>(NP)</td>
<td>History of Latin America</td>
</tr>
<tr>
<td>SOCIO 156</td>
<td>(NP)</td>
<td>Mexican Culture in the United States</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS IN A.A. MAJOR** ................................................................. 20
The Athletic Training/Sports Medicine program at MJC is designed to prepare students for appropriate procedures in prevention, care, and rehabilitation of athletic injuries. This degree is also designed to transfer students to four-year institutions where they can continue their education to fulfill the requirements of the National Athletic Trainer's Association. This will lead to the student's eventual eligibility to challenge the national examination, and upon satisfactory completion of the required Courses and passing the exam, become a Certified Athletic Trainer.

A.S. Degree: Athletic Training/Sports Medicine

- To earn an Associate in 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 31 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 111</td>
<td>3 OR</td>
<td>Applications of Sports Medicine</td>
</tr>
<tr>
<td>PE 109</td>
<td>3</td>
<td>Peak Performance through Mental Training</td>
</tr>
<tr>
<td>PE 141</td>
<td>2</td>
<td>Supervision in Athletic Training</td>
</tr>
<tr>
<td>PE 108</td>
<td>3</td>
<td>Care and Prevention of Athletic Injuries</td>
</tr>
<tr>
<td>HE 110</td>
<td>3</td>
<td>Healthful Living</td>
</tr>
<tr>
<td>ANAT 125</td>
<td>3</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>HE 101</td>
<td>3</td>
<td>Emergency Response CPR FPR</td>
</tr>
<tr>
<td>PHYSO 101</td>
<td>3</td>
<td>Introductory Human Physiology</td>
</tr>
<tr>
<td>CHEM 143</td>
<td>3</td>
<td>Introduction to College Chemistry</td>
</tr>
<tr>
<td>FDNTR 219</td>
<td>3</td>
<td>Food and Nutrition</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>3</td>
<td>General Psychology</td>
</tr>
</tbody>
</table>

**MINIMUM UNITS FOR A.S. MAJOR** 31

A.A. Degree: University Preparation, Emphasis in Health & Physical Education (p. 170)
PE 121 (NP) Coaching Effectiveness .............................................................. 3

1-5 units of PE activity classes from the following list

PEA 104 (NP) Adapted Strength Development ........................................ 1
PEA 106 (NP) Functional Water Exercise .................................................. 1
PEA 107 (NP) Adapted Swimming ................................................................. 1
PEA 108 (NP) Adapted Aquatics ................................................................. 1
PEA 116 (NP) Adapted Run/Walk ................................................................. 1
PEA 119 (NP) Adapted Sports ................................................................. 1
PEA 154 (NP) Back Basics ................................................................. 1
PEA 141 (NP) Adaptive Fitness ................................................................. 1
PEC 102 (NP) Water Aerobics .................................................................. ½, 1
PEC 106 (NP) Badminton ........................................................................ 1
PEC 108 (NP) Deep Water Aerobics ......................................................... ½, 1
PEC 111 (NP) Beginning Racquetball ...................................................... 1
PEC 112 (NP) Intermediate Racquetball ................................................ 1
PEC 118 (NP) Bowling ........................................................................... ½, 1
PEC 120 (NP) Hip Hop ........................................................................... ½, 1
PEC 122 (NP) Beginning Modern Dance ................................................ ½, 1
PEC 123 (NP) Intermediate Modern Dance ........................................... ½, 1
PEC 124 (NP) Advanced Modern Dance ................................................. ½, 1
PEC 126 (NP) Jazz Dance ....................................................................... 1
PEC 128 (NP) Aerobics ........................................................................... ½, 1
PEC 130 (NP) International Folk Dance .................................................. ½, 1
PEC 133 (NP) Ballet 1 ............................................................................. ½, 1
PEC 134 (NP) Contact Improvisation .................................................... ½, 1
PEC 140 (NP) Exercise for Fitness ............................................................ ½, 1
PEC 143 (NP) Beginning Golf .................................................................. ½, 1
PEC 144 (NP) Intermediate Golf ............................................................... ½, 1
PEC 145 (NP) Advanced Golf ................................................................. ½, 1
PEC 147 (NP) Gymnastics ...................................................................... ½, 1
PEC 148 (NP) Yoga for Better Health ....................................................... 1
PEC 150 (NP) Intermediate Yoga for Better Health ................................. ½, 1
PEC 159 (NP) Spirit Leadership Training .................................................. ½, 1
PEC 164 (NP) Self-Defense .................................................................... 1
PEC 165 (NP) Judo ................................................................................ 1
PEC 166 (NP) Intermediate Judo .............................................................. ½, 1
PEC 168 (NP) Beginning Swimming .......................................................... ½, 1
PEC 169 (NP) Intermediate Swimming ................................................... ½, 1
PEC 170 (NP) Advanced Swimming .......................................................... ½, 1
PEC 171 (NP) Swim for Fitness ................................................................. ½, 1
PEC 172 (NP) Lifeguard Training .............................................................. 1
PEC 174 (NP) Table Tennis .................................................................... ½, 1
PEC 175 (NP) Beginning Tennis ............................................................... ½, 1
PEC 176 (NP) Intermediate Tennis ............................................................ ½, 1
PEC 177 (NP) Advanced Tennis ............................................................... ½, 1
PEC 178 (NP) Tournament Tennis ............................................................ ½, 1
PEC 179 (NP) Track and Field ................................................................. ½, 1
PEC 182 (NP) Training for Distance Running ......................................... ½, 1
PEC 183 (NP) Volleyball ....................................................................... ½, 1
PEC 184 (NP) Power Volleyball ................................................................. ½, 1
PEC 187 (NP) Pilates for Fitness ............................................................... ½, 1
PEC 190 (NP) Advanced Water Polo .......................................................... ½, 1
PEC 191 (NP) Power Lifting .................................................................... 1
PEC 195 (NP) Weight Training ................................................................. 1
PEC 197 (NP) Advanced Weight Training ................................................ 1
PEM 108 (NP) Baseball .......................................................................... ½, 1
PEM 111 (NP) Baseball Team Play Concepts ............................................ ½, 1
PEM 112 (NP) Beginning Basketball ....................................................... ½, 1
PEM 113 (NP) Intermediate Basketball .................................................. ½, 1
PEM 114 (NP) Advanced Basketball ....................................................... ½, 1
PEM 140 (NP) Touch Football and Kanaki ............................................. ½, 1
PEM 141 (NP) Advanced Touch Football ............................................... ½, 1
PEM 162 (NP) Soccer ........................................................................... ½, 1
PEM 196 (NP) Advanced Wrestling .......................................................... ½, 1
PEW 164 (NP) Women’s Indoor-Outdoor Soccer .................................... ½, 1
PEW 166 (NP) Women’s Self-Defense ....................................................... ½, 1

PEW 167 (NP) Women’s Beginning Judo ................................................. ½, 1
PEW 180 (NP) Women’s Softball ............................................................... ½, 1
PEW 192 (NP) Women’s Weight Training ................................................ 1
PEVM 100 (NP) Varsity Baseball ............................................................... 3
PEVM 105 (NP) Men’s Varsity Basketball (Fall) .......................................... 3
PEVM 106 (NP) Men’s Varsity Basketball (Spring) ...................................... 1½
PEVM 110 (NP) Men’s Varsity Cross-Country ......................................... 3
PEVM 115 (NP) Varsity Football ............................................................... 3
PEVM 120 (NP) Men’s Varsity Golf ........................................................... 3
PEVM 122 (NP) Men’s Varsity Soccer ..................................................... 3
PEVM 125 (NP) Men’s Varsity Swimming and Diving .............................. 3
PEVM 130 (NP) Men’s Varsity Tennis ...................................................... 3
PEVM 135 (NP) Men’s Varsity Track-Field ................................................ 3
PEVM 140 (NP) Men’s Varsity Water Polo ............................................... 3
PEVM 145 (NP) Varsity Wrestling .............................................................. 3
PEVW 100 (NP) Women’s Varsity Basketball (Fall) ................................... 3
PEVW 101 (NP) Women’s Varsity Basketball (Spring) ............................. 1½
PEVW 103 (NP) Women’s Varsity Cross-Country .................................. 3
PEVW 115 (NP) Women’s Varsity Golf .................................................... 3
PEVW 120 (NP) Women’s Varsity Softball ............................................... 3
PEVW 123 (NP) Women’s Varsity Soccer ................................................ 3
PEVW 125 (NP) Women’s Varsity Swimming and Diving ....................... 3
PEVW 130 (NP) Women’s Varsity Tennis ................................................. 3
PEVW 135 (NP) Women’s Varsity Track-Field .......................................... 3
PEVW 140 (NP) Women’s Varsity Volleyball .......................................... 3
PEVW 145 (NP) Women’s Varsity Water Polo ........................................ 3

MINIMUM UNITS IN A.A. MAJOR .................................................................. 20
Educational Programs in Public Safety

George Boodrookas, Dean
East Campus
Morris Memorial, Room 204
(209) 575-6714

John Sola,
Director, Regional Fire Training Center
(209) 549-7028

SUPPORT STAFF
Gail Campbell, Administrative Secretary
Erk Klevmyer Fire Science Facility Technician

Degrees and/or Certificates Offered:
Emergency Medical Technician, C
Fire Academy, SR
Fire Science, C

Emergency Medical Technician (EMT) PROGRAM

EMS 390: Emergency Medical Technician (EMT) prepares students for certification as an Emergency Medical Technician I in the State of California. This one semester, 6 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 the Regional Fire Training Center at (209) 549-7028.

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, 18 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 Requisites

All of the requisites must be valid through the end of the course and the EMT certification examination.

EMS 350 First Responder with Health Care Provider CPR ................................................. 3
CPR

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.

EMS 390 [NP] Emergency Medical Technician 1 .................................................. 6
TOTAL UNITS FOR SKILLS RECOGNITION AWARD ............................................ 6

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 Standford Ave., Suite D1
Modesto, CA 95350
(209) 529-5085
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 will be provided by the Public Safety division.

REQUIRED PREPARATION
- Satisfactory completion of FSCI 301 and EMS 350 or EMS 390 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 17 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI 362</td>
<td>Basic Fire Academy</td>
<td>8</td>
</tr>
<tr>
<td>FSCI 363</td>
<td>Advanced Fire Academy</td>
<td>9</td>
</tr>
</tbody>
</table>

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 17

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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI 301</td>
<td>Fire Protection Organization</td>
<td>3</td>
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</tbody>
</table>

ELECTIVE COURSES - COMPLETE 27 UNITS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>FSCI 302</td>
<td>Fire Prevention Technology</td>
<td>3</td>
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<tr>
<td>FSCI 303</td>
<td>Fire Prevention Equipment</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 304</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 305</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 309</td>
<td>Fire Management 2E</td>
<td>2</td>
</tr>
<tr>
<td>FSCI 311</td>
<td>Rescue Systems</td>
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</tr>
<tr>
<td>FSCI 322</td>
<td>Fire Science Career Development/Promotions</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 323</td>
<td>Fire Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FSCI 327</td>
<td>Fire Apparatus and Equipment</td>
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<tr>
<td>FSCI 328</td>
<td>Investigation of Fires</td>
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</tr>
<tr>
<td>FSCI 332</td>
<td>Fire Fighting Tactics and Strategy</td>
<td>3</td>
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<tr>
<td>FSCI 336</td>
<td>Rescue Practices</td>
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<tr>
<td>FSCI 337</td>
<td>Wildland Fire Control</td>
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</tr>
<tr>
<td>FSCI 346</td>
<td>Instructional Methods for Fire Training Officers</td>
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<tr>
<td>FSCI 347</td>
<td>Fire Prevention 1C</td>
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</tr>
<tr>
<td>FSCI 348</td>
<td>Public Fire Education 1</td>
<td>2</td>
</tr>
<tr>
<td>FSCI 350</td>
<td>Fire Command 1A</td>
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<tr>
<td>FSCI 351</td>
<td>Fire Command 1B</td>
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<td>FSCI 352</td>
<td>Training Instructor 1A</td>
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<tr>
<td>FSCI 353</td>
<td>Training Instructor 1B</td>
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<td>Fire Prevention 1A</td>
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</tr>
<tr>
<td>FSCI 355</td>
<td>Fire Prevention 1B</td>
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<td>FSCI 356</td>
<td>Fire Management 1</td>
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<tr>
<td>FSCI 357</td>
<td>Fire Investigation 1</td>
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<td>FSCI 362</td>
<td>Basic Fire Academy</td>
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<td>FSCI 363</td>
<td>Advanced Fire Academy</td>
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<tr>
<td>FSCI 364</td>
<td>Driver Operator 1</td>
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<td>FSCI 368</td>
<td>Fire Apparatus Driver/Operator</td>
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<td>FSCI 365</td>
<td>Emergency Aid First Responder</td>
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<td>FSCI 372</td>
<td>Fire Management 2B</td>
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<td>FSCI 373</td>
<td>Fire Instructor 2A</td>
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<tr>
<td>FSCI 374</td>
<td>Fire Instructor 2B</td>
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<tr>
<td>FSCI 378</td>
<td>Fire Science Special Topics</td>
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<tr>
<td>EMS 350</td>
<td>First Responder with Health Care Provider CPR</td>
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<tr>
<td>EMS 380</td>
<td>Basic ECG Interpretation</td>
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<tr>
<td>EMS 389</td>
<td>Emergency Medical Technician 1 LAB</td>
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<tr>
<td>EMS 390</td>
<td>Emergency Medical Technician 1</td>
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<tr>
<td>EMS 391</td>
<td>Emergency Medical Tech. 1 (Refresher)</td>
<td>1</td>
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<tr>
<td>NR 379</td>
<td>Wildland Fire Control</td>
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</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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below which include completion of the requirements for certificate of achievement in Fire Science.

MINIMUM 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. 67) or the University Preparation Pathway (p. 65) 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 Code</th>
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<tbody>
<tr>
<td>ARCH 100</td>
<td>Introduction to Engineering &amp; Architecture</td>
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</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>
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<tr>
<td>ARCH 152</td>
<td>Architectural Design 1</td>
<td>5</td>
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<tr>
<td>ARCH 153</td>
<td>Architectural Design 2</td>
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ELECTIVE COURSES - COMPLETE 7 UNITS

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<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>
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<tr>
<td>ARCH 117</td>
<td>History of Architecture 1</td>
<td>3</td>
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<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>
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<tr>
<td>ENGR 101</td>
<td>Plane Surveying</td>
<td>3</td>
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<tr>
<td>ENGT 210</td>
<td>Introduction to CAD</td>
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<tr>
<td>ENGT 211</td>
<td>Intermediate Topics in CAD</td>
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</table>

MINIMUM UNITS IN AS MAJOR .................................................. 30

A.A. Degree: University Preparation, Emphasis in Biological Sciences (p. 168)
A.A. Degree: University Preparation, Emphasis in Chemistry (p. 168)

Chemistry PROGRAM

A.S. Degree: City & Regional Planning

City & Regional Planning PROGRAM

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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES – COMPLETE 18 UNITS

ARCH 100 [1] Introduction to Engineering & Architecture .............................................. 1
ARCH 121 [1] Beginning Graphics & Design 1 ................................................................. 4
ARCH 131 [1] Architectural Drafting 1 ........................................................................... 4

ELECTIVE COURSES – COMPLETE 12 UNITS

ARCH 117 [NP] History of Architecture 1 ..................................................................... 3
ARCH 118 [NP] History of Architecture 2 ..................................................................... 3
ENGT 210 [NP] Introduction to CAD ............................................................................. 1
ENGT 211 [NP] Intermediate Topics in CAD ................................................................. 1
GEOL 161 [NP] Physical Geology .................................................................................. 4
ECON 101 [NP] Principles of Macroeconomics ............................................................. 3 OR
ECON 102 [NP] Economic Principles: Microeconomics .............................................. 3
MATH 122 [NP] Functions & Analytic Geometry ......................................................... 5

MINIMUM UNITS IN A.S. MAJOR ........................................................................ 30

Construction Management PROGRAM

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

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES – COMPLETE 8 UNITS

ARCH 100 [1] Intro to Engineering & Architecture ...................................................... 1
ARCH 107 [2] Materials of Construction Laboratory ....................................................... 1
ARCH 131 [2] Architectural Drafting 1 ........................................................................... 4

ELECTIVE COURSES – COMPLETE 22 UNITS

Complete a minimum of 5 units from the following:

MATH 134 [NP] Elementary Statistics ......................................................................... 5
MATH 170 [3] Calculus: First Course .......................................................................... 5

Complete a minimum of 5 units from the following:

CHEM 143 [1] Introductory College Chemistry ............................................................ 5

Complete a minimum of 7 units from the following:

BUSAD 201 [NP] Financial Accounting ..................................................................... 4
BUSAD 202 [NP] Managerial Accounting ................................................................. 4
BUSAD 218 [NP] Business Law .................................................................................. 4

Remainder of elective units may be selected from the three sections above or from the following:

ARCH 121 [1] Beginning Graphics and Design 1 ......................................................... 4
ENGR 101 [3] Introduction to Surveying and Topography ......................................... 3
GEOL 161 [NP] Physical Geology ............................................................................... 4

MINIMUM 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

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES – COMPLETE 18 UNITS

- ARCH 131 [2] Architectural Drafting 1 ..................................................... 4
- ARCH 100 [1] Intro to Engineering & Architecture ............................ 1
- ENGR 100 [1] Intro to Engineering & Architecture ............................ 1
- ENGT 210 [1] Intro to Computer-Assisted Drafting .............................. 1
- ENGT 211 [1] Intermediate Computer-Assisted Drafting .................. 1

ELECTIVE COURSES – COMPLETE 12 UNITS

Complete a minimum of 2 units from the following:
- ENGT 375 [NP] Construction Blueprint Reading ..................................... 2
- INTEC 340 [NP] Uniform Building Code, Structural ......................... 3
- INTEC 341 [NP] Uniform Building Code, Non-Structural ................ 3
- INTEC 344 [NP] Uniform Mechanical Code .................................... 3

Complete a minimum of 3 units from the following:
- CMPSC 201 [NP] General Computer Literacy ..................................... 3
- CMPSC 278 [NP] Spreadsheet Software ............................................... 3
- CMPGR 202 [NP] Introduction to Computer Graphics ....................... 3
- CMPGR 235 [NP] Beginning Photoshop ............................................... 3

Remainder of elective units may be selected from the two sections above or from the following:
- ENGR 101 [3] Introduction to Surveying and Topography ............. 3
- ENGT 212 [NP] Advanced Computer Assisted Drafting ................ 1
- ENGT 215 [NP] Introduction to Solid Modeling ................................. 1
- MATH 121 [3] Pre-Calculus I ............................................................. 5
- MATH 122 [4] Pre-Calculus II ............................................................ 5
- MACH 211D [NP] Machine Tool Technology I ................................. 4

TOTAL UNITS IN A.S. MAJOR ................................................................. 30

Engineering

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

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in Engineering will be able to:

1. Develop an educational plan and strategy for success in continued undergraduate education at a university.
2. Perform appropriately as a member of a team, completing tasks and assuming appropriate roles.
3. Design and conduct experiments as well as analyze and interpret data.
4. Present projects professionally using effective oral presentation skills.
5. Research, analyze, and write effectively on engineering and science-related topics.
6. Develop engineering drawings according to professional standards and industry conventional (“best”) practices.
7. Identify, analyze, and formulate solutions to engineering problems using skills obtained in mathematics, physics, chemistry, and engineering-related courses.
8. Recognize the need for engaging in life-long learning and professional development.

MAJOR REQUIREMENTS

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES – COMPLETE 16 UNITS

- ENGR 100 [1] Introduction to Engineering ........................................ 1
- MATH 121 [1] Calculus: First Course ................................................. 5

ELECTIVE COURSES – COMPLETE 15 UNITS

Complete 6 units minimum Engineering coursework*:
- ENGR 107 [NP] Introduction to Surveying & Topography ............ 3
- ENGR 141 [4] Intro to Circuit Analysis (w/ Lab) ............................... 4
- CHEM 101 [1] General Chemistry 1 .............................................. 5
- MATH 173 [3] Calculus: Third Course ............................................. 5
  Ordinary Differential Equations

* Electrical Engineering students may take ENGR 141 only (4 units) and substitute 2 units of approved electives. See faculty advisor for approval.

MINIMUM UNITS IN A.S. MAJOR ......................................................... 31
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.

A.S. Degree: Engineering Technology

To earn an Associate in Science Degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 67) or the University Preparation Pathway (p. 65) 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>CHEM 143</td>
<td>1</td>
<td>Introductory College Chemistry</td>
</tr>
<tr>
<td>CHEM 101</td>
<td>2</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>ENGR 100</td>
<td>1</td>
<td>Intro to Engineering &amp; Architecture</td>
</tr>
<tr>
<td>ENGR 127</td>
<td>3</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>MATH 134</td>
<td>NP</td>
<td>Elementary Statistics</td>
</tr>
<tr>
<td>PHYS 101</td>
<td>3</td>
<td>General Physics: Mechanics</td>
</tr>
<tr>
<td>PHYS 142</td>
<td>3</td>
<td>Mechanics, Heat and Waves</td>
</tr>
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</table>

**ELECTIVE COURSES – COMPLETE 11 UNITS**

Complete a minimum of 6 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>CMPSC 201</td>
<td>NP</td>
<td>General Computer Literacy</td>
</tr>
<tr>
<td>MACH 211D</td>
<td>NP</td>
<td>Machine Tool Technology I</td>
</tr>
<tr>
<td>WELD 200</td>
<td>NP</td>
<td>Arc &amp; Gas Welding</td>
</tr>
<tr>
<td>Any ELTEC 100 or 200 series course</td>
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<td></td>
</tr>
<tr>
<td>Any INTEC 100 or 200 series course</td>
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Remainder of elective units may be selected from the section above or from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ARCH 106</td>
<td>1</td>
<td>Materials of Construction</td>
</tr>
<tr>
<td>ARCH 107</td>
<td>2</td>
<td>Materials of Construction Laboratory</td>
</tr>
<tr>
<td>ARCH 131</td>
<td>3</td>
<td>Architectural Drafting</td>
</tr>
<tr>
<td>ENGR 101</td>
<td>3</td>
<td>Introduction to Surveying and Topography</td>
</tr>
<tr>
<td>ENGR 130</td>
<td>3</td>
<td>Properties of Materials</td>
</tr>
<tr>
<td>ENGT 210</td>
<td>1</td>
<td>Intro to Computer-Assisted Drafting</td>
</tr>
<tr>
<td>ENGT 211</td>
<td>1</td>
<td>Intermediate Computer-Assisted Drafting</td>
</tr>
<tr>
<td>ENGT 215</td>
<td>NP</td>
<td>Introduction to Solid Modeling</td>
</tr>
<tr>
<td>MATH 138</td>
<td>NP</td>
<td>Calculus for Business &amp; Social Sciences</td>
</tr>
<tr>
<td>MATH 171</td>
<td>3</td>
<td>Calculus: First Course</td>
</tr>
<tr>
<td>MATH 172</td>
<td>4</td>
<td>Calculus: Second Course</td>
</tr>
<tr>
<td>PHYS 143</td>
<td>4</td>
<td>Electricity, Magnetism, Optics, Atomic &amp; Nuclear Structure</td>
</tr>
</tbody>
</table>

**TOTAL UNITS IN A.S. MAJOR** .................................................. 31

A.A. Degree: University Preparation, Emphasis in Environmental Science (p.169)
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. 67) or the University Preparation Pathway (p. 65) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 30 UNITS

Complete all of the following courses

<table>
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<tr>
<th>Course</th>
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<tr>
<td>CHEM 101</td>
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<td>CHEM 102</td>
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<td>MATH 171</td>
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<tr>
<td>MATH 172</td>
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Complete one of the following Physics sequences

Sequence A

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<tbody>
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<tr>
<td>PHYS 102</td>
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Sequence B

<table>
<thead>
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</tr>
<tr>
<td>PHYS 102</td>
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</tbody>
</table>

Sequence C

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>PHYS 142</td>
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</tr>
<tr>
<td>PHYS 143</td>
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</tr>
</tbody>
</table>

ELECTIVE COURSES - COMPLETE 4 UNITS

<table>
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<tr>
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<th>Units</th>
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<td>ASTRO 151</td>
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<tr>
<td>ASTRO 152</td>
<td>1</td>
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<tr>
<td>ASTRO 160</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 112</td>
<td>5 OR</td>
</tr>
<tr>
<td>CHEM 113</td>
<td>5</td>
</tr>
<tr>
<td>GEOL 161</td>
<td>4</td>
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<td>EASCI 161</td>
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</tr>
<tr>
<td>MATH 173</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>5 OR</td>
</tr>
<tr>
<td>PHYS 103</td>
<td>5</td>
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</tbody>
</table>

MINIMUM UNITS IN A.S. MAJOR ................................................. 34

A.A. Degree: University Preparation, Emphasis in Physics (p. 173)

Educational Programs in

Technical Education

(see Career Technical Education (p. 133)
General Studies with Emphasis

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.

To earn an A.A. in General Studies with an emphasis:

1. Follow the Career and Technical Education Pathway for associate degree on page 71 of the 2011-2012 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.

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.

To earn an A.A. in General Studies with an emphasis:

1. Follow the Career and Technical Education Pathway for associate degree on page 71 of the 2011-2012 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.

Transfer Preparation Degrees:
- AA - University Preparation, Emphasis in Agricultural Science
- AA - University Preparation, Emphasis in Art and Design
- AA - University Preparation, Emphasis in Biological Science
- 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 Humanities
- AA - University Preparation, Emphasis in Liberal Studies (Teacher Preparation for CSU Stanislaus)
- AA - University Preparation, Emphasis in Language Studies
- AA - University Preparation, Emphasis in Mathematics
- AA - University Preparation, Emphasis in Physics
- AA - University Preparation, Emphasis in Social and Behavioral Sciences
- AA - University Preparation, Emphasis in Language and Rationality
- AA - University Preparation, Emphasis in Humanities

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

A.A. Degree:
General Studies, Emphasis in Humanities

ABOUT THIS EMPHASIS
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.

- ANTH 104 Linguistic Anthropology (SU07) .......................... 3
- ARCH 117 History of Architecture 1 .................................... 3
- ARCH 118 History of Architecture 2 .................................... 3
- ART 124 Color and Design 1 (SU07) ................................. 3
- ART 160 Appreciation of Art ........................................... 3
- ART 161 American Art ..................................................... 3
- ART 162 History of Renaissance Art ................................. 3
- ART 163 History of Modern Art ....................................... 3
- ART 164 History of Art 1 .................................................. 3
- ART 165 History of Art 2 .................................................. 3
- ART 168 Survey of Photography ...................................... 3
- ART 169 History of Non-Western Art (F99) ...................... 3
- CMPGR 201 Animation: A Global View of Art in Motion (F03) ................................. 3
- ENGL 102 Advanced Composition & Introduction to Literature (SU07) ................................. 3
PHILO 135 Environmental Ethics (SU09) ................................................................. 3
PHILO 121 History of Philosophy: Modern ............................................................... 3
PHILO 115 Religion: A Philosophical and Comparative Inquiry ............................ 3
PHILO 113 Philosophy of Art (SU08) ....................................................................... 3
MUST 122 Music Theory .......................................................................................... 3
HUMAN 140 Introduction to World Mythology (F06) ............................................. 3
HUMAN 130 Introduction to Western Religions (F03) ............................................. 3
HUMAN 110 East Meets West .................................................................................. 3
HIST 104 Western Civilizations to 1650 ................................................................. 3
GERM 102 German 2 .............................................................................................. 5
GERM 101 German 1 .............................................................................................. 5
GERM 102 German 2 .............................................................................................. 5
HIST 106 Western Civilization to the 16th Century ............................................... 3
HIST 107 Western Civilization from the 17th Century .......................................... 3
HUMAN 101 Introduction to the Humanities .......................................................... 3
HUMAN 105 Early Humanistic Traditions .............................................................. 3
HUMAN 106 Humanities in the Modern World ...................................................... 3
HUMAN 110 East Meets West ................................................................................ 3
HUMAN 130 Introduction to Western Religions (F03) ............................................. 3
HUMAN 140 Introduction to World Mythology (F06) ............................................. 3
INTDS 150 History of Interiors/Decorative Arts I ................................................ 3
INTDS 155 History of Interiors/Decorative Arts 2 (F06) ......................................... 3
ITAL 101 Italian 1 (SU08) ..................................................................................... 5
MUSG 101 Music Appreciation ........................................................................... 3
MUSG 102 Introduction to World Music (F99) ..................................................... 3
MUSG 111 Introduction to American Popular Music .............................................. 3
MUSG 121 History of Western Music 1 ............................................................... 3
MUSG 122 History of Western Music 2 ............................................................... 3
MUST 121 Music Theory 1 ................................................................................... 3
MUST 122 Music Theory 2 ................................................................................... 3
PE 194 Introduction to World Dance (F01) ............................................................ 3
PHILD 101 Philosophy .......................................................................................... 3
PHILD 111 Ethics: Theory and Application ........................................................... 3
PHILD 113 Philosophy of Art (SU08) ................................................................. 3
PHILD 115 Religion: A Philosophical and Comparative Inquiry .......................... 3
PHILD 120 History of Philosophy: Ancient .......................................................... 3
PHILD 121 History of Philosophy: Modern .......................................................... 3
PHILD 123 Twentieth Century Philosophy (F02) .................................................. 3
PHILD 135 Environmental Ethics (SU09) ............................................................ 3
PHILD 140 Philosophy and Film ............................................................................ 3
PORTG 51 Introduction to Practical Portuguese 1 (F99) .......................................... 3
RATV 150 Introduction to The Media Arts ........................................................... 3

UNIT S IN EMPHASIS ................................................................................................. 18

A.A. Degree:
General Studies, Emphasis in Natural Sciences

ABOUT THIS EMPHASIS
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.

AG 376 Basic Science and Laboratory Techniques ............................................. 3
ANAT 125 Human Anatomy (SU07) ................................................................. 3
ANSC 200 Introduction to Animal Science ......................................................... 3
ANTHR 101 Physical Anthropology .................................................................. 3
ANTHR 105 Physical Anthropology Laboratory (1)(F98) ............................... 1
AP 50 Elementary Human Anatomy-Physiology (F96) ..................................... 3
AP 150 Integrative Anatomy & Physiology ......................................................... 5
ASTRO 141 Introduction to Astrophysics ........................................................... 3
ASTRO 160 Introduction to Modern Astronomy ................................................ 3
BIO 50 Basic Biology (F97) ................................................................................. 3
BIO 101 Biological Principles ............................................................................ 5
BIO 111 General Biology ................................................................................... 4
BIO 114 General Biology (SU10) ....................................................................... 4
BIO 115 Genetics, Evolution, and Society (F97) ............................................... 3
BIO 116 Biology: A Human Perspective (SU10) ............................................. 4
BIO 130 Introduction to Marine Vertebrates (F00) ............................................. 3
BIO 130/130L Introduction to Marine Vertebrates w/ Lab (3-1)(F00) ............... 3
BIO 140 Introduction to Marine Biology ........................................................... 4
BIO 145 Introduction to Freshwater Biology ...................................................... 4
BOT 101 General Botany (SU10) ........................................................................ 4
BOT 110 Plant Biology ....................................................................................... 3

CHEM 101 General Chemistry 1 (SU09) ............................................................... 5
A.A. Degree: General Studies, Emphasis in Language and Rationality

ABOUT THIS EMPHASIS

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
<td>Composition and Reading</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 225</td>
<td>Agriculture Computer Applications (SU09)</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 210</td>
<td>Business Communication</td>
<td>3</td>
</tr>
<tr>
<td>CMPGR 264</td>
<td>Publishing on the World Wide Web (F97)</td>
<td>3</td>
</tr>
</tbody>
</table>

A.A. Degree: General Studies, Emphasis in Social & Behavioral Sciences

ABOUT THIS EMPHASIS

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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>Introduction to Administration of Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJU 225</td>
<td>Introduction to Corrections (SU07)</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 210</td>
<td>Elements of Agricultural Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGGE 146</td>
<td>Agriculture, Environment &amp; Society (F97)</td>
<td>3</td>
</tr>
<tr>
<td>ANTHP 102</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHP 104</td>
<td>Linguistic Anthropology (SU07)</td>
<td>3</td>
</tr>
<tr>
<td>ANTHP 140</td>
<td>Magic, Witchcraft, and Religion (F97)</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 240</td>
<td>Principles of Management</td>
<td>3</td>
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</table>

UNITED IN EMPHASIS: 18
### Academic Programs

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLDIV 103</td>
<td>Child Growth and Development</td>
<td>3</td>
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<tr>
<td>CLDIV 104</td>
<td>Child Growth and Development - Conception Through Early Childhood (SU09)</td>
<td>2</td>
</tr>
<tr>
<td>CLDIV 105</td>
<td>Child Growth and Development - Late Childhood Through Adolescence (SU10)</td>
<td>2</td>
</tr>
<tr>
<td>CLDIV 160</td>
<td>Atypical Development (F03)</td>
<td>3</td>
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<tr>
<td>CLDIV 262</td>
<td>Diversity in Educational Settings (SU09)</td>
<td>3</td>
</tr>
<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>ECON 115</td>
<td>Economic History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>ENSC 110</td>
<td>California Water (F98)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>Cultural Geography (F98)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 104</td>
<td>California Geography (SU09)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 105</td>
<td>Economic Geography (F00)</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 110</td>
<td>World Regional Geography (F97)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 101</td>
<td>History of the United States to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIST 102</td>
<td>History of the United States Post Civil War</td>
<td>3</td>
</tr>
<tr>
<td>HIST 104</td>
<td>Western Civilization to 1650</td>
<td>3</td>
</tr>
<tr>
<td>HIST 105</td>
<td>Western Civilization Since 1650</td>
<td>3</td>
</tr>
<tr>
<td>HIST 106</td>
<td>World Civilization to the 16th Century (F02)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 107</td>
<td>World Civilization from the 16th Century (F02)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 112</td>
<td>Twentieth Century America</td>
<td>3</td>
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<tr>
<td>HIST 113</td>
<td>Social and Cultural History of the United States prior to the 20th Century</td>
<td>3</td>
</tr>
<tr>
<td>HIST 115</td>
<td>Economic History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 116</td>
<td>Women in American History</td>
<td>3</td>
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<tr>
<td>HIST 119</td>
<td>Social and Cultural History of 20th Century-America (F00)</td>
<td>3</td>
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<tr>
<td>HIST 125</td>
<td>History of Mexico</td>
<td>3</td>
</tr>
<tr>
<td>HIST 128</td>
<td>History of the American Far Western Frontier</td>
<td>3</td>
</tr>
<tr>
<td>HIST 129</td>
<td>History of California</td>
<td>3</td>
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<tr>
<td>HIST 145</td>
<td>History of Latin America</td>
<td>3</td>
</tr>
<tr>
<td>HIST 154</td>
<td>African Americans through the 19th Century (F99)</td>
<td>3</td>
</tr>
<tr>
<td>HIST 155</td>
<td>African Americans in 20th and 21st Centuries (F99)</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 101</td>
<td>Introduction to Human Services</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 114</td>
<td>Death and Dying (SU08)</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 142</td>
<td>Introduction to Psychosocial Rehabilitation (SU09)</td>
<td>3</td>
</tr>
<tr>
<td>HUMSR 143</td>
<td>Psychosocial Rehabilitation Practice (SU09)</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 101</td>
<td>American Politics</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 102</td>
<td>The Constitution and the Rights of Americans</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 110</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 111</td>
<td>War and Peace: From Lenin to Al Qaeda (SU07)</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 120</td>
<td>California Politics and Problems</td>
<td>3</td>
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<tr>
<td>POLSC 130</td>
<td>Political Theory</td>
<td>3</td>
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<tr>
<td>POLSC 131</td>
<td>American Political Thought (SU07)</td>
<td>3</td>
</tr>
<tr>
<td>POLSC 140</td>
<td>Comparative Politics (SU07)</td>
<td>3</td>
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<tr>
<td>PSYCH 51</td>
<td>Psychology in Everyday Life</td>
<td>3</td>
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<tr>
<td>PSYCH 101</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 104</td>
<td>Social Psychology (SU08)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 105</td>
<td>Abnormal Psychology (SU07)</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 111</td>
<td>Psychology of Gender (SU07)</td>
<td>3</td>
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<tr>
<td>SOCIO 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 102</td>
<td>Social Problems in United States (F98)</td>
<td>3</td>
</tr>
<tr>
<td>SOCIO 131</td>
<td>Sociology of Medicine: Cross Cultural Perspectives (F00)</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>SOCSC 105</td>
<td>Women's Studies (F91)</td>
<td>3</td>
</tr>
<tr>
<td>SOCSC 110</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Students can take advantage of numerous study groupwork environments around campus.
To earn an A.A. in University Preparation with an emphasis

1. Complete the requirements for the University Preparation Pathway as listed on page 65 of the 2010-11 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 _______."

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.

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 use ASSIST in selecting courses from the emphasis to ensure that the coursework applies to your baccalaureate major.
University Preparation

PROGRAM

Certificate of Achievement: CSU-GE Pattern

To earn a Certificate of Achievement in CSU General Education, the student must complete the requirements detailed in the CSU-GE Pattern. Each course must be completed with a grade of C or better. Students who plan to transfer to CSU should consult with a counselor about proper selection of courses, and General Education certification.

Certificate of Achievement: IGETC Pattern

To earn a Certificate of Achievement in IGETC, the student must complete the requirements detailed in the IGETC Pattern. Each course must be completed with a grade of C or better. Students who plan to transfer to CSU or UC should consult with a counselor about proper selection of courses and General Education certification.

A.A. Degree: University Preparation, Emphasis in Agricultural Sciences

ABOUT THIS EMPHASIS

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.

EXPECTED STUDENT LEARNING OUTCOMES

In addition to demonstrating the abilities listed as General Education Student Learning Outcomes, students who complete the Associate’s Degree in University Preparation, Emphasis in Agricultural Sciences will be able to:

1. Give specific examples of careers in the general agriculture area and briefly describe the prerequisites for these careers.
2. Describe the basic workplace readiness skills needed to be successful in agriculture careers.
3. Describe the importance of the agriculture industry to the local, state and national economy.

EMPHASIS REQUIREMENTS

To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – TAKE 12 UNITS.

- AGEC 210 [NP] Elements of Agricultural Economics ............................................ 3
- ANSC 200 [NP] Introduction to Animal Science .................................................... 3
- NR 200 [NP] Soils ......................................................................................................... 4
- PLSC 200 [NP] Introduction to Plant Science ......................................................... 3

ELECTIVE COURSES – TAKE 5 UNITS.

- AGEC 200 [NP] Agricultural Accounting and Analysis ........................................... 3
- AGEC 225 [NP] Agriculture Computing Applications ............................................. 3
- AGEC 280 [NP] Agricultural Sales and Service ....................................................... 3
- AGM 200 [NP] Introduction to Mechanical Technology ........................................... 3
- AGM 215 [NP] Machinery Management .................................................................. 3 OR
- AGM 220 [NP] Industrial/Agricultural Machinery .................................................. 3 OR
- AGM 230 [NP] Field Surveying .............................................................................. 3
- ANSC 201 [NP] Beef Cattle Science ....................................................................... 3
- ANSC 202 [NP] Swine Science ............................................................................. 3
- ANSC 203 [NP] Sheep Science ............................................................................. 3
- ANSC 214 [NP] Livestock Feeding and Nutrition .................................................... 3
- ANSC 215 [NP] Animal Health and Sanitation ....................................................... 3
- EHS 210 [NP] Introduction to Environmental Horticulture .................................... 3
- EHS 276 [NP] Landscape Maintenance .................................................................. 3
- MATH 111 [NP] Applied College Algebra ................................................................ 5
- MATH 134 [NP] Elementary Statistics ................................................................... 5
- MATH 138 [NP] Calculus for Business and Social Sciences ................................... 3
- NR 220 [NP] Introductory Forestry ....................................................................... 3
- NR 222 [NP] Native Tree and Shrub Identification ................................................ 3
- PLSC 205 [NP] Field Crops ................................................................................... 3 OR
- PLSC 215 [NP] Vegetable Crops ........................................................................... 3 OR
- PLSC 230 [NP] Fruit Science ................................................................................. 3
- PLSC 250 [NP] Plant Nutrition and Fertilizer ........................................................ 3 OR
- PLSC 260 [NP] Plant Disease Control .................................................................... 3

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. 157) This degree has been specifically designed to prepare students for transfer.

A.A. Degree: University Preparation, Emphasis in Art and Design

ABOUT THIS EMPHASIS

The study of art and design includes drawing, painting, printmaking, sculpture/installation (wood, metal, ceramics, mixed media), photography, digital art, and art history. To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES – TAKE 12 UNITS.

- ART 120 [NP] Basic Drawing ................................................................. 3
- ART 124 [NP] Color and Design ............................................................ 3
- ART 140 [NP] Sculpture ............................................................................. 3
- ART 164 [NP] History of Art ................................................................. 3 OR
- ART 165 [NP] History of Art ........................................................................ 3

ELECTIVE COURSES – TAKE 2 COURSES.

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.

- ART 108 [NP] Ceramics .............................................................................. 3
- ART 121 [NP] Basic Drawing ......................................................................... 3
- ART 123 [NP] Figure Drawing ................................................................. 3
- ART 125 [NP] Color and Design ................................................................. 3
- ART 147 [NP] Painting 1 (in Acrylic) ......................................................... 3 OR
- ART 148 [NP] Painting 1 (in Oil) ................................................................. 3 OR
- ART 164 [NP] History of Art ........................................................................ 3 OR
- ART 165 [NP] History of Art ........................................................................ 3

UNITS REQUIRED IN AREA OF EMPHASIS ........................................................................... 18
A.A. Degree: University Preparation, Emphasis in **Biological Sciences**

### ABOUT THIS EMPHASIS

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 University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

<table>
<thead>
<tr>
<th>REQUIRED COURSES – TAKE 13 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101  [NP] Biological Principles ........................................... 5</td>
</tr>
<tr>
<td>BOT 101  [NP] General Botany ............................................................. 4</td>
</tr>
<tr>
<td>ZOOL 101 [NP] General Zoology ............................................................. 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE COURSES – TAKE 10 UNITS</th>
</tr>
</thead>
</table>

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.

| CHEM 101  [NP] General Chemistry 1 ............................................... 5 |
|---------------|-----------------|
| CHEM 102  [NP] General Chemistry 2 ............................................ 5 |
| MATH 134  [NP] Elementary Statistics ............................................ 5 |
| MATH 171  [NP] Calculus: First Course .............................................. 5 |
| MATH 172  [NP] Calculus: Second Course ........................................... 5 |
| PHYS 142  [NP] Mechanics, Heat, and Waves ..................................... 5 |
| PHYS 143  [NP] Electricity, Magnetism, Optics, Atomic and Nuclear Structure .... 5 |

**UNITS REQUIRED IN AREA OF EMPHASIS** ........................................... 21-25

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 University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

<table>
<thead>
<tr>
<th>REQUIRED COURSES – COMPLETE 10 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101  [NP] General Chemistry 1 ............................................... 5</td>
</tr>
<tr>
<td>CHEM 102  [NP] General Chemistry 2 ............................................ 5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE COURSES – COMPLETE 10 UNITS</th>
</tr>
</thead>
</table>

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.

| CHEM 112  [NP] Organic Chemistry 1 ............................................. 5 |
|--------------|------------------|
| CHEM 113  [NP] Organic Chemistry 2 ............................................. 5 |
| MATH 171  [NP] Calculus: First Course ............................................ 5 |
| MATH 172  [NP] Calculus: Second Course ......................................... 5 |
| MATH 173  [NP] Calculus: Third Course ........................................... 5 |
| PHYS 142  [NP] Mechanics, Heat, and Waves ..................................... 5 |
| PHYS 143  [NP] Electricity, Magnetism, Optics, Atomic and Nuclear Structure ... 5 |

**UNITS IN REQUIRED IN AREA OF EMPHASIS** ........................................ 20

A.A. Degree: University Preparation, Emphasis in **Communication**

### 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 University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

<table>
<thead>
<tr>
<th>REQUIRED COURSES – COMPLETE 9 UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCOM 100  [NP] Fundamentals of Public Speaking ................................ 3</td>
</tr>
<tr>
<td>SPCOM 103  [NP] Interpersonal Communication ...................................... 3</td>
</tr>
<tr>
<td>SPCOM 104  [NP] Argumentation .......................................................... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTIVE COURSES – COMPLETE 9 UNITS</th>
</tr>
</thead>
</table>

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.

| JRNAL 100  [NP] Reporting and Writing for the Media ....................... 3 |
|----------|-----------------|
| RATV 134  [NP] Television Studio Production .................................... 3 |
| RATV 150  [NP] Introduction to the Media Arts ................................... 3 |
| SPCOM 102  [NP] Introduction to Human Communication ..................... 3 |
| SPCOM 105  [NP] Forensics Workshop .................................................. 2 |
| SPCOM 106  [NP] Organizational Communication .................................... 3 |
| SPCOM 130  [NP] Intercultural Communication ...................................... 3 |

**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. 125) 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. 159) 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. 151) 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. 65) which include completion of the requirements below.

See advisor for selection of courses.

**REQUIRED COURSES — COMPLETE 18 UNITS.**

- BIO 101 [NP] Biological Principles .................................................. 5
- BOT 101 [NP] General Botany ................................................................. 4
- CHEM 101 [NP] General Chemistry I .................................................. 5 OR
- CHEM 143 [NP] Introductory College Chemistry ................................ 5
- GEOL 161 [NP] Physical Geology........................................................... 4

**UNITS REQUIRED IN AREA OF EMPHASIS .............................................. 18**

A.A. Degree: **General Studies,** Emphasis in **Language and Rationality**

ABOUT THIS EMPHASIS

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 course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101</td>
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</tr>
<tr>
<td>AGEC 225</td>
<td>3</td>
</tr>
<tr>
<td>BUSAD 210</td>
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<td>CMPGR 265</td>
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<td>CMPSC 201</td>
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<td>CMPSC 203</td>
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<td>CMPSC 241</td>
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<td>MATH 80</td>
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<td>MATH 88</td>
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<td>SPCOM 110</td>
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</tr>
<tr>
<td>SPCOM 130</td>
<td>3</td>
</tr>
<tr>
<td>SUPR 106</td>
<td>3</td>
</tr>
</tbody>
</table>

**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. 65) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES — COMPLETE 9 UNITS.

- GEOG 101 [NP] Physical Geography ................................. 3
- GEOG 102 [NP] Cultural Geography ............................. 3
- GEOG 105 [NP] Economic Geography ............................ 3

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 OR
- ECON 102 [NP] Principles of Microeconomics .................. 3
- GEOG 109* [NP] Introduction to Geographic Information Systems 3 OR
- GEOG 110 [NP] World Regional Geography ....................... 3
- HIST 104 [NP] Western Civilizations .............................. 3
- HIST 105 [NP] Western Civilization ................................. 3
- HIST 125 [NP] History of Mexico ..................................... 3
- HIST 129 [NP] History of California ............................... 3
- HIST 145 [NP] History Of Latin America ......................... 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

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 University Preparation Pathway (p. 65) 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 OR
- BIO 116 [NP] Biology: A Human Perspective ................. 4
- CHEM 143 [NP] Introductory College Chemistry .......... 5
- PHYSO 101 [NP] Introductory Human Physiology .......... 5

TOTAL UNITS REQUIRED IN AREA OF EMPHASIS ............................ 19*

*In the past, ANAT 125 and PHYSO 101 were only 4 units. Students may use these courses as substitutes for those above but must achieve a minimum of 18 units total. If needing an additional unit, students may use MICRO 101 or CHEM 144. Students should visit the Science, Mathematics, and Engineering division office (Science 126) to petition for these substitution options.

A.A. Degree: University Preparation, Emphasis in Humanities

ABOUT THIS EMPHASIS

The humanities include, but are not limited to, history; literature; philosophy and ethics; foreign languages and cultures; linguistics; jurisprudence or philosophy of law; archaeology; comparative religion; the history, theory, and criticism of the arts; and those aspects of the social sciences (anthropology, sociology, psychology, political science, government, and economics) that use historical and interpretive rather than quantitative methods. The humanities enable us to reflect upon our lives and ask fundamental questions of value, purpose, and meaning in a rigorous and systematic way.

To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES — COMPLETE 2 COURSES.

- HUMAN 105 [NP] Early Humanistic Traditions ................. 3
- HUMAN 106 [NP] Humanities in the Modern World ........... 3

ELECTIVE COURSES — COMPLETE 12 UNITS.

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 12 units from the following list of electives. Additional courses may be required by your transfer university. (Units for each course indicated by parentheses.)

TAKE ONE COURSE FROM EACH OF THE TWO GROUPS:

GROUP 1:
- ENGL 116 [NP] Introduction to Drama .......................... 3
- ENGL 131 [NP] Introduction to World Literature to 1500 .... 3
- ENGL 132 [NP] Introduction to World Literature from 1500 to Present 3
- ENGL 135 [NP] American Literature to 1850 .................. 3

GROUP 2:
- ENGL 137 [NP] Shakespeare ................................. 3
- ENGL 138 [NP] Shakespeare and the Elizabethans .......... 3
- ENGL 139 [NP] Shakespeare and the Jacobean Era ......... 3
- ENGL 140 [NP] Shakespeare and the Restoration Era ...... 3
- ENGL 141 [NP] Shakespeare and the 17th Century .......... 3
- ENGL 142 [NP] Shakespeare and the 18th Century ......... 3

UNITs REQUIRED IN AREA OF EMPHASIS ........................................ 18
A. A. Degree: 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 MIC Catalog. These majors have been specifically designed to prepare students for transfer. See the Arts, Humanities, and Communications Division (p. 110).

A. A. Degree: University Preparation, Emphasis in Language Studies

Students who complete the AA in University Preparation: Emphasis in Language Studies will enhance their communication abilities, cultural awareness, and critical thinking skills in English as well as one or two other languages. To earn this 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 patterns.

### REQUIRED COURSES - COMPLETE 17 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 103</td>
<td>3</td>
<td>Advanced Composition and Critical Thinking</td>
</tr>
</tbody>
</table>

**COMPLETE 14 UNITS IN ONE OR TWO LANGUAGES FROM THE FOLLOWING:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREN 101</td>
<td>3</td>
<td>French 1</td>
</tr>
<tr>
<td>FREN 102</td>
<td>3</td>
<td>French 2</td>
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<td>FREN 103</td>
<td>3</td>
<td>French 3</td>
</tr>
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<td>FREN 104</td>
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<td>French 4</td>
</tr>
<tr>
<td>GERM 101</td>
<td>3</td>
<td>German 1</td>
</tr>
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<td>GERM 102</td>
<td>3</td>
<td>German 2</td>
</tr>
<tr>
<td>ITAL 101</td>
<td>3</td>
<td>Italian 1</td>
</tr>
<tr>
<td>SIGN 123</td>
<td>3</td>
<td>Beginning Communication with the Deaf</td>
</tr>
<tr>
<td>SIGN 126</td>
<td>3</td>
<td>Intermediate Communication with the Deaf</td>
</tr>
<tr>
<td>SIGN 127</td>
<td>3</td>
<td>Advanced Communication with the Deaf</td>
</tr>
<tr>
<td>SPAN 101</td>
<td>3</td>
<td>Spanish 1</td>
</tr>
<tr>
<td>SPAN 102</td>
<td>3</td>
<td>Spanish 2</td>
</tr>
<tr>
<td>SPAN 103</td>
<td>3</td>
<td>Spanish 3</td>
</tr>
<tr>
<td>SPAN 104</td>
<td>3</td>
<td>Spanish 4</td>
</tr>
<tr>
<td>SPAN 105</td>
<td>3</td>
<td>Spanish for Spanish Speakers: Fundamentals</td>
</tr>
<tr>
<td>SPAN 106</td>
<td>3</td>
<td>Spanish for Spanish Speakers: Intermediate</td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES - COMPLETE 3 UNITS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 175</td>
<td>3</td>
<td>Women in Literature</td>
</tr>
<tr>
<td>ENGL 176</td>
<td>3</td>
<td>Introduction to Mexican Literature</td>
</tr>
<tr>
<td>SPAN 112</td>
<td>3</td>
<td>Intro to Native American Lit, Mythology, and Oral Tradition</td>
</tr>
<tr>
<td>SPAN 173</td>
<td>3</td>
<td>Survey of Latin American Literature</td>
</tr>
<tr>
<td>SPCOM 130</td>
<td>3</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

### COMPLETE UP TO TWO FROM THE FOLLOWING HUMANITIES COURSES:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN 101</td>
<td>3</td>
<td>Introduction to the Humanities</td>
</tr>
<tr>
<td>HUMAN 110</td>
<td>3</td>
<td>East Meets West</td>
</tr>
<tr>
<td>HUMAN 130</td>
<td>3</td>
<td>Introduction to Western Religions</td>
</tr>
<tr>
<td>HUMAN 140</td>
<td>3</td>
<td>Introduction to World Mythology</td>
</tr>
<tr>
<td>PHILO 111</td>
<td>3</td>
<td>Ethics: Theory and Application</td>
</tr>
<tr>
<td>PHILO 120</td>
<td>3</td>
<td>History of Philosophy: Ancient</td>
</tr>
<tr>
<td>PSYCH 101</td>
<td>3</td>
<td>General Psychology</td>
</tr>
</tbody>
</table>

### MINIMUM UNITS IN EMPHASIS

18

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**ABOUT THIS EMPHASIS**

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</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE 109</td>
<td>1</td>
<td>International Student/New American Focus</td>
</tr>
<tr>
<td>GUIDE 110</td>
<td>1</td>
<td>Educational Planning</td>
</tr>
<tr>
<td>GUIDE 111</td>
<td>1</td>
<td>Career Awareness</td>
</tr>
<tr>
<td>GUIDE 112</td>
<td>1</td>
<td>Job Hunting Skills</td>
</tr>
<tr>
<td>GUIDE 116</td>
<td>2</td>
<td>Orientation for Re-Entry Adults</td>
</tr>
<tr>
<td>GUIDE 120</td>
<td>3</td>
<td>Success Strategies for Transfer Students</td>
</tr>
</tbody>
</table>

4. **ACTIVITIES REQUIREMENT** - fulfill the activities requirement for associate degree. Complete one of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 102</td>
<td>3</td>
<td>Introduction to Computer Graphics</td>
</tr>
<tr>
<td>ART 120</td>
<td>3</td>
<td>Basic Drawing I</td>
</tr>
<tr>
<td>ART 124</td>
<td>3</td>
<td>Color Fundamentals I</td>
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<tr>
<td>ART 140</td>
<td>3</td>
<td>Sculpture I</td>
</tr>
<tr>
<td>CMPGR 202</td>
<td>3</td>
<td>Introduction to Computer Graphics</td>
</tr>
<tr>
<td>MTHTR 160</td>
<td>3</td>
<td>Fundamentals of Acting</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:
- SPCM 100  [NP] Fundamentals of Public Speaking ......................... 3
- SPCM 102  [NP] Introduction to Human Communication............... 3

AREA A.2 – COMPLETE THE FOLLOWING COURSE:
- ENGL 101  [NP] Composition and Reading .................................. 3

AREA A.3 – COMPLETE ONE OF THE FOLLOWING COURSES:
- CMPSC 103  [NP] Symbolic Logic ..................................................... 3
- ENGL 103  [NP] Advanced Composition and Critical Thinking ........... 3
- PHIL 103  [NP] Symbolic Logic ......................................................... 3
- PHIL 105  [NP] Reasoning ................................................................. 3
- PHIL 107  [NP] Philosophy of Science ................................................. 3
- SPCM 104  [NP] Argumentation ....................................................... 3
- SPCM 107  [NP] Introduction to Debate .............................................. 3

CSU-GE: AREA B
Physical Universe, its Life Forms & Mathematical Concepts

AREA B.1 – COMPLETE THE FOLLOWING COURSE:
- EASCI 161  [NP] Earth Science ......................................................... 4

AREA B.2 – COMPLETE THE FOLLOWING COURSE:
- BIO 111  [NP] General Biology ......................................................... 4

AREA B.3 – (FULFILLED THROUGH SATISFACTORY COMPLETION OF AREAS A.1 AND B.2)

AREA B.4 – COMPLETE THE FOLLOWING COURSE:
- MATH 105  [NP] Structure of Mathematics 1 ................................. 4

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) .... 3
- ENGL 168  [NP] Adolescent Literature ............................................. 3

AREA C.3 – COMPLETE ONE OF THE FOLLOWING COURSES:
- HUMAN 101  [NP] Introduction to the Humanities ............................ 3
- HUMAN 105  [NP] Early Humanistic Traditions ............................... 3
- HUMAN 106  [NP] Humanities in the Modern World ....................... 3
- HUMAN 110  [NP] East Meets West .................................................. 3
- MUSG 101  [NP] Music Appreciation (preferred by CSU Stanislaus) .... 3
- MUSG 121  [NP] History of Western Music 2 ................................... 3
- MUSG 122  [NP] History Western Music 2 ...................................... 3
- MUSG 111  [NP] Introduction to American Popular Music ............... 3
- MUSG 102  [NP] Introduction to World Music ................................. 3
- PHIL 101  [NP] Philosophy ............................................................... 3
- PHIL 111  [NP] Ethics: Theory and Application .................................. 3
- PHIL 115  [NP] Religion: A Philosophical and Comparative Inquiry ...... 3
- PHIL 121  [NP] History of Philosophy: Modern ...................... 3
- PHIL 123  [NP] 20th Century Philosophy .......................................... 3
- PHIL 140  [NP] Philosophy and Film .............................................. 3

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. up to 1877 ............................... 3

CSU-GE AREA D.2 – COMPLETE ONE COURSE
- HIST 102  [NP] History of the U.S. post Civil War ......................... 3
- POLSC 101  [NP] American Politics .............................................. 3

CSU-GE AREA D.3 – COMPLETE ONE COURSE
- GEOG 102  [NP] Cultural Geography .............................................. 3
- GEOG 105  [NP] Economic Geography .......................................... 3
- GEOG 110  [NP] World Regional Geography ................................. 3

CSU-GE AREA E. – COMPLETE ONE OF THE FOLLOWING COURSES
- PSYCH 141  [NP] Human Lifespan ................................................. 3
- CLD 103  [NP] Child Growth and Development ............................ 3

(TOTAL UNITS REQUIRED TO FULFILL GENERAL EDUCATION 42 1/2 - 45)

6. COMPLETE THE LIBERAL STUDIES EMPHASIS

A.A. Degree: University Preparation, Emphasis in Mathematics

ABOUT THIS EMPHASIS

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.

To earn an Associate in Arts Degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway (p. 65) which include completion of the requirements below. See advisor for selection of courses.

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

UNITS IN AREA OF EMPHASIS 20
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 (p. 112). 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.

A.S. 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 (p. 161). 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 University Preparation Pathway (p. 65) 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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101</td>
<td>General Physics: Mechanics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 102</td>
<td>General Physics: Waves, Thermodynamics, and Optics</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 103</td>
<td>General Physics: Electricity, Magnetism, &amp; Modern Physics</td>
<td>5</td>
</tr>
</tbody>
</table>

Complete two of the following mathematics courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>MATH 173</td>
<td>Calculus: Third Course</td>
<td>5</td>
</tr>
<tr>
<td>MATH 174</td>
<td>Introduction to Linear Algebra and Ordinary Diff. Equations</td>
<td>5</td>
</tr>
</tbody>
</table>

**UNITS IN AREA OF EMPHASIS............................................. 20**

A.A. Degree: **Theatre**

Students intending to transfer as theatre majors are advised to complete the requirements of the Associate of Arts in Theatre (p. 116). 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.
Tania knew she wanted to study for a career in medicine, even while attending Pittman High School in Turlock. She also had the grades to go straight to a University of California upon graduation in 2008. She chose instead to attend Modesto Junior College and has no regrets about her choice. “I have had to pay out of pocket for my education so I could not afford four years at a UC,” Tania explains. “I think this has made me value my education more.”

Tania was born in Ayutla, a small town in Jalisco, Mexico and immigrated to the United States with her parents and brother when she was only a year old, living in San Francisco until moving to Turlock in the 7th grade. Tania has great admiration for her parents and all they have accomplished. Upon arrival in the U.S. they enrolled in school to learn English, achieved their GEDs and worked hard to attain their dreams. “They came from Mexico with nothing. Neither of them spoke English. My mom is now the supervisor of housekeeping for Samaritan Village and my father is a butcher for Cost Less Foods. They have taught me that it is important to achieve on your own merits, to always work to the best of your ability and not settle for anything less.”

Tania has emulated her parents’ example, working hard to reach her goals. She and her older brother, who attends CSUS after transferring from MJC, are first generation college students, and Tania is very motivated when it comes to her education. She will graduate in spring 2011 with Associates in Science degrees in both Biology and Chemistry. However, she is also very family-oriented and admits it will be hard, even now, to leave her parents and home as she transfers to UC Davis in the fall to pursue a Bachelor of Science degree in Biology. With her heart set on becoming either a pediatrician or a physician’s assistant, Tania hopes to complete graduate studies at UCD as well. She dreams of working in a hospital setting that will provide her with an opportunity to help disadvantaged people and cites this as her inspiration for pursuing a medical career.

Tania’s favorite course at MJC was Biology which is not surprising considering her educational goals. However, her favorite instructor was her Chemistry professor, Laura Maki, because of her dedication to helping students understand some of the difficult concepts. “I was having trouble with some of the material and she was always willing to help. She didn’t just give you the answer, but rather helped you understand the information so that you could find the answer yourself.” Tania also has high praise for her transfer counselor Leticia Cavazos and for the Transfer Admissions Guarantee (TAG) program which is assisting her in making a seamless transition from MJC to UC Davis. “Leticia guided me towards the classes I needed for transfer and kept me from taking a class I didn’t need or courses the UC wouldn’t accept.”

In addition to carrying a full time unit load each semester, Tania works part time as a waitress at Samaritan Village and enjoys interacting with the senior citizens who live there, and she says that it has given her a broader perspective and strengthened her priorities. “Older people have a different view of life. It’s awesome to be able to hear some of their life stories and perspective. They see the bigger picture and are happy to be alive. Each day is precious to them, when many of us just take life for granted. This has helped me to understand what is really important.”

Between studies and work, Tania has had little time for extra-curricular activities on campus. When she does find a few spare hours, Tania jumps at the chance to go wakeboarding or tubing on Lake Don Pedro or Lake McClure. She also enjoys going dancing, listening to music, watching basketball, the ‘49ers and movies, and hanging out with family and friends.

When asked what words of wisdom she might share with other aspiring transfer students, Tania responds, “Stay on track. Don’t let any distractions get to you. Sometimes your personal life gets involved and classes get difficult, but just keep going! Your life is what you make of it!”

Tania Zavalza

“Modesto Junior College has helped me to mature. As a young transfer student, I feel more prepared and ready to leave home now and take the next step in my life.”
Courses Offered at Modesto Junior College

Celebrating 90 Years of Educational Excellence!

www.mjc.edu
PLSC 200—INTRODUCTION TO PLANT SCIENCE 3 Units
Introduction to plant sciences, including structure, growth processes, propagation, physiology, growth media, biological competences, and pest-burden factors of field, turf, and ornamental plants. Lecture (A-F Only): Transfer: CSU UC General Education: (MGE GE-A) (CSU-GE B1, B3) (IGETC 5A)
ADJU
(Administration of Justice)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mgc.edu/prospective/programs/bbs/
Instructors: Greg Hausman, Dale Hoagland

ADJU 144—COMMUNITY AGENCY SERVICE 1 UNIT
Formerly listed as ADJU 145
Prerequisite: Satisfactory completion of ADJU 201.
Corequisite: Concurrent enrollment in ADJU 145.
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. Three maximum completions. Field trips may be required. (A-F Only)
Lecture. Transfer: CSU

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. Discussion. 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)
(TCSU CJ 110) General Education: (MJX–GE B)(CSU–GE D0)

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 constitutionsal basis of evidence; constitutional and proced-
­ural considerations affecting arrest, 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 expecta-
tions 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 these 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 those 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
Survey of the existing policies and principles affecting report writing in American criminal justice.
Emphasizing preparation, oral presentation, and thoroughness necessary for judicial acceptance.
Lecture. (A-F Only) Transfer: CSU

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 may be required. (A-F Only)
Lecture. Transfer: (CSU)

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
sidearms. 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. Students may repeat
any combination of ADJU 215/216 or 219 for a maximum of 4 completions. Materials fee required.
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 LENF 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 protec-
tors, 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. (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. (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 cor-
rectional 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 origins 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

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. (A-F Only) Transfer: CSU, UC. General Education: (MJC-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

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 349—A,B,C,D WORK EXPERIENCE 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.) Lecture.

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.

ADJU 358—DOMESTIC VIOLENCE AS A SOCIAL ISSUE 3 UNITS

AG (Agriculture, Vocational & Technical)
Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: David Baggett, Marlies Boyd, Gail Brumley, John Mendes

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. Transfer: CSU, MJC Activities.

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)MJC Guidance. Transfer: CSU

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) Transfer: CSU

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) Transfer: CSU

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) Lab. Transfer: CSU

AG 280—AGRICULTURAL COMPUTATIONS 3 UNITS
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. Field trips are not required. (A-F Only) Lecture. Transfer: CSU

AG 285—AGRICULTURAL COMMUNICATIONS 3 UNITS
Fundamentals of agricultural communication, including written, electronic, graphic, and oral communication methodologies. Field trips are required. (A-F Only) Lecture. Transfer: CSU

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. Lect/Lab. May be completed up to four times. (A-F Only)
AG 349 A, B, C, D — WORK EXPERIENCE 1, 2, 3 AND 4 UNITS
AGRICULTURE — SUPERVISED PRACTICE
Corerequisite: Enrollment in a minimum of 7 units, which may include Cooperative Vocational Work Experience.

Designed for agriculture 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 of 4 units may be earned per semester. May be repeated to a maximum of 16 units. Work Experience credit (Cooperative Vocational Work Experience is included in this maximum) (A-F Only)

AG 376 — BASIC SCIENCE AND LABORATORY TECHNIQUES 3 UNITS

Essential laboratory techniques and basic science principles and information designed to qualify students for service in agriculture at technical levels. Field trips are required. Lecture/Laboratory. (A-F Only) General Education: (MJC-GE: A)

AG 390 A, B, C, D — AGRICULTURAL SKILLS TRAINING 1/2, 1, 2, 3, 4 UNITS

Emphasis on developing or upgrading skills of agricultural employees. Field trips are required. Four completions allowed. Total number of AG 390 A, B, C, D units not to exceed eight total units. Lecture/ Laboratory. (A-F Only)

AGEC (Agricultural Economics)

Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: Matlues Boyd, Gail Brumley, Bill Hobby, Amanda Schnoor

AGEC 50 — SURVEY OF AGRICULTURAL ECONOMICS 3 UNITS

A preparatory course designed for further agriculture business knowledge and prepare for entry level employment and further agricultural business course pursuits. Field trips required. Lecture/ Laboratory/Other.

AGEC 55 — PREPARATORY AGRICULTURE COMPUTER APPLICATIONS 3 UNITS

Preparation for computer use in the workplace, emphasizing agribusiness situations, use of computer applications software, including word processors, spreadsheets, and databases. Includes information access, telecommunications, and other software appropriate to agribusiness. Lecture/Laboratory.

AGEC 200 — AGRICULTURAL ACCOUNTING AND ANALYSIS 3 UNITS

Study of the principles of agricultural accounting systems and types of records, how to compute and use measures of earnings and costs of production to improve efficiency in agricultural operations. Field trips are not required. (A-F Only) Lecture. Transfer: CSU

AGEC 208 — INTRODUCTION TO INTERNATIONAL BUSINESS 3 UNITS

Recommended for Success: Satisfactory completion of BUSAD 248 also offered as BUSAD 208.

A comprehensive overview of international business. Offers a global perspective of international trade, international marketing, international accounting, the operation of multinational companies, economic theories and forces, international organizations and the political and cultural impact of world trade. Lecture. Field trips required. Transfer: CSU

AGEC 209 — IMPORT/EXPORT FUNDAMENTALS 3 UNITS

Recommended for Success: Satisfactory completion of AGEC 208 also offered as BUSAD 209.

Overview of processes and procedures involved in importing and exporting and products and services. Special emphasis on finance and financial documentation. Lecture. Field trips required. Transfer: CSU

AGEC 210 — ELEMENTS OF AGRICULTURAL ECONOMICS 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to be enrolled in or have satisfactorily completed MATH 70.

The place of agriculture and agribusiness in the economic system, basic economic concepts, and problems of agriculture, supply and marketing problems, factors of production, state and federal agriculture programs affecting agriculture’s economic position. Field trips might be required. (A-F Only) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D2)

AGEC 215 — AGRICULTURAL MARKETING 3 UNITS

Structure and framework of agricultural marketing, history and present trends; marketing principles, policies, channels, institutions, regulatory agencies, cooperative marketing orders, cyclical and seasonal price variations, integration, and foreign and domestic trade; consideration of specific marketing problems affecting area commodities. Field trips required. Lecture/Laboratory. (A-F Only) Transfer: CSU

AGEC 220 — AGRICULTURAL BUSINESS MANAGEMENT 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete AGEC 200 and AGEC 285 or equivalent) and (MATH 70 or equivalent), and one AG 300 class.

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 workplace, with emphasis on using software to solve agribusiness accounting problems, record keeping, creating sales presentations, and authoring business reports. Field trips may be required. (A-F Only) Lecture. 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 (Agriculture, General)

Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: Steve Amador., David Baggett, Marlies Boyd, Gail Brumley, Todd Conrado, Bill Hobby, John Mendes, Mike Morales, Dale Pollard, Amanda Schnoor

AGGE 145 — PARLIAMENTARY PROCEDURE 1 UNIT

Also offered as SPDM 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D7)

AGGE 150 — SUSTAINABLE PRODUCTION SYSTEMS 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to complete more than two agricultural laboratory courses.

Fundamental concepts and processes of sustainable agricultural systems, with emphasis on integrating agricultural activities with ecological principles. Field trips might be required. (A-F Only) Lecture. Transfer: (CSU, UC)
AGME 191X, A, B—AGRICULTURE FIELD STUDIES 1/2 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 completions allowed. Field trips required. Lecture. Materials fee required. (A-F Only)

AGM (Agricultural Mechanics)
Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: Steve Amador, Todd Conrado

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, electrical wiring, plumbing, masonry and welding as related to agriculture maintenance and repair. Designed for students who seek to develop basic mechanical skills. Materials Fee Required. Field trips might be required. (A-F Only) Lecture /Lab. Transfer: CSU

AGM 210—AGRICULTURAL WELDING * 3 UNITS
Introduction and basic instruction in various welding and cutting methods to include: SMAW, GMAW, DAW, GTAW. Coursework to include machine selection and setup. Materials fee required. (A-F Only) Lecture /Lab. 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. Materials fee required. (A-F Only) Lecture /Lab. Transfer: CSU

AGM 212—MECHANICAL SYSTEMS DESIGN & EVALUATION 1 3 UNITS
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). 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. 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 222—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. Lecture/ Lab. (A-F or P/NP) 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) Lecture/Lab. Transfer: CSU

AGM 230—FIELD SURVEYING 2 UNITS
Also offered as ENGR 230
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete AG 280 or satisfactorily complete MATH 70.
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. Materials Fee Required Field trips are required. (A-F Only) Lecture/Lab. 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. (A-F Only) Transfer: CSU

AGM 240—TRUCK AND TRACTOR POWER TRAINS 3 UNITS
Operation and repair of truck and tractor transmissions and power train systems. Topics to include diagnostics and repair of transmissions, clutches and differentials. Field trips might be required. (A-F Only) Lecture /Lab. Transfer: CSU

AGM 241—DIESEL ENGINE PRINCIPLES 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to complete AGM/AUTEC 289.
Also offered as AUTEC 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. Lecture/ 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. Lecture/ 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 AUTEC 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. Materials fee required. (A-F Only) Lecture/Lab. Transfer: CSU

AGM 245—DIESEL ENGINE FUEL SYSTEMS & 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 are required. (A-F Only) Lecture/Lab. 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) Lecture/Lab. 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) Lecture/Lab. Transfer: CSU

AGM 262—HYDRAULICS/PNEUMATICS 3 UNITS
Also offered as AUTEC 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. Lecture. Transfer: CSU

AGM 280—MOBILE MACHINERY HYDRAULIC SYSTEMS 3 UNITS
Recommended for Success: Satisfactory completion of AGM 280 and (AGM 215 or 220)
Fundamental principles and practices of hydraulic circuitry 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. Lect/Lab. Materials Fee Required. (A-F or P/NP) Transfer: CSU

AGM 289—PRINCIPLES OF POWER MECHANICS/ SMALL ENGINES 3 UNITS
Formerly listed as AGM/AUTEC 289
Also offered as AUTEC 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) Lecture/Lab. Transfer: CSU

AGM 310—AGRICULTURAL WELDING 2 UNITS
Basic welding techniques and theory instruction in oxyacetylene welding and cutting, shield metal arc welding, and flame 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) Lecture/Lab.

ANAT (Anatomy)

ANAT 125—HUMAN ANATOMY 5 UNITS
Prerequisite: Satisfactory completion of BIO 116 or BIO 111 or BIO 101.
Study of human body structures including organ, tissue and cellular interrelationships. Involves extensive use of models, specimens, histological material, and dissection. Cadaver materials and demonstrations are used. Intended for students entering the health professions. Field trips may be required. (A-F or P/NP) Lecture/Lab. Discussion Transfer: (CSU, UC)(CC BIOL 10) (MJC ANAT 125 + PHYSIO 101 = CC BIO 10+60) General Education: (MUC-GE: A)(CSU-GE: B2, B3)(IGETC: 5B)

ANAT 180 A,B—INTRODUCTION TO TUTORING ANATOMY 1,2 UNITS
Prerequisite: Satisfactory completion of ANAT 125
Fundamental skills of tutoring in the anatomy lab. Strategies for tutoring students enrolled in Anatomy 125 will be learned. Specific focus will be on techniques for identifying microscopic and macroscopic structures in the anatomy lab. Intended for students selected as tutors in the ANAT 125 lab. May be completed up to 4 times. Lab. (A-F or P/NP) Transfer: CSU

ANSC (Animal Science)

ANSC 50—PREPARATORY ANIMAL SCIENCES 3 UNITS
A preparatory survey of the livestock industry, supply of animal products and their uses. A special emphasis on the origin, characteristics, adaptation and contributions of farm animals to the agriculture industry. Analyze the economic trends and career opportunities in animal agriculture. Field trips required. (A-F or P/NP). Lecture.

ANSC 55—INTRODUCTION TO VETERINARY TECHNOLOGY 3 UNITS
Preparation for veterinary technology courses. Topics include: anatomy and physiology, nutrition, pharmacology, common diseases and disorders, genetics and herdology, and career opportunities. Lecture (A-F Only).

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) General Education: (MUC-GE: A)(CSU-GE:B2)(IGETC:SB)

ANSC 201—BEEF CATTLE SCIENCE 3 UNITS
A study of the principles and practices of purebred and commercial beef cattle 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 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 farm 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 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) Lecture/Lab. Transfer: CSU

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) Lecture. Transfer: CSU

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 and factors determining carcass value. Lecture/Laboratory/required attendance at judging contests arranged. Two maximum completions. (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) Lecture/Lab. Transfer: CSU (UC)

ANSC 212—ADVANCED LIVESTOCK SELECTION AND 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 herd size 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. (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, UC)

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 & EVALUATION 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to have completed the ANSC 220, ANSC 221 and/or completed another class in livestock evaluation. 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. Two maximum completions. Field trips are required. (A-F Only) Lecture/Lab. 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 recordkeeping. 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 recordkeeping to ensure scientifically-based management decisions and consumer product acceptance. Field trips are required. (A-F Only) Lecture/Lab. Transfer: (CSU, UC)

ANSC 232—AVIAN PRACTICES 3 UNITS
Practices in avian management including breeders, fayers, 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; culling and selection of poultry. Incubation, hatch- ing and grading of eggs. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 240 — Beef Fitting and Showing 2 UNITS
Principles of selection, feeding, fitting, 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, fitting, 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, fitting, and presentation of swine for show. Field trips required. Three maximum completions. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 243 — Equine Fitting and Showing 2 UNITS
Formerly titled Horse Fitting and Showing
Principles of selection, feeding, fitting, and presentation of horses for show. Field trips required. Three maximum completions. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 244 — Dairy Fitting & Showing 2 UNITS
Principles of selection, feeding, fitting 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, fitting and presentation of meat goats for show. Field trips may be required. Three maximum completions. Lecture/Laboratory. (A-F Only) Transfer: CSU

ANSC 250 — Veterinary Physiology, Anatomy & Terminology
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. Lecture. 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
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
Recommended for Success: Satisfactory completion of ENGL 50.
Introduction to manual and automated veterinary lab techniques and procedures, including work with blood, urine, fecal and skin samples. (A-F or P/NP). 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) Lecture. Transfer: CSU

ANSC 255 — Preparation for Surgical and Dental Assistance
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
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
Basic veterinary nursing procedures including animal restraint, administration of medication, catheterization, vaccination techniques, bathing, bandaging, and performing minor medical procedures. (A-F Only) Lecture. Transfer: CSU

ANSC 258 — Beginning 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) Lecture/Lab. Transfer: CSU

ANSC 259 — Pack Animal - Walk/Ride 2 UNITS
Selection, care, and use of pack animals and equipment. Topics will include safe packing trips and understanding environmental concerns on the trail. Having a horse is not a requirement for this class. Field trips may be required. (A-F Only) Lecture/Lab. 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) Lecture/Lab. 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) Lecture/Lab. Transfer: CSU

ANSC 269 — Farm Processing of Meat Animals 2 UNITS
Economics of producing and harvesting farm-raised animals. Safety factors, local and state regulations as they apply to harvesting live animals. Processing will include poultry, rabbits, sheep or goats, swine, and beef. Proper sanitation, harvesting, cutting, wrapping and curing will be covered for the above-mentioned species. Field trips are required. (A-F Only) Lecture/Lab.

ANSC 316 — 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 - AP

ANTHR (Anthropology)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: my.mjc.edu/prospective/programs/bdss/
Instructors: Debra Bolter, Susan Kerr, James Todd

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. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(TCSU ANTH 110) General Education: (MJC-GE: A)(CSU-GE: B2, D1)(IGETC: 5B)

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 research and analysis of culture and cultural processes; cross-cultural comparisons of subsistence patterns, economics, religion, kinship, gender, language, sexuality and political organization; and, cultural change in a globalized world. Recommended for people who travel internationally. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ANTHR 2)(TCSU ANTH 120) General Education: (MJC-GE: B)(CSU-GE: D1)(IGETC: 4A)

ANTHR 104—LINGUISTIC ANTHROPOLOGY 3 UNITS
Formerly listed as ANTHR 104 - Language, Culture and Communication
Recommended for Success: Before enrolling in this course, students are strongly advised to complete ENGL 101 with a minimum grade of C.
An introduction to the anthropological study of language. Topics include: a survey of linguistics, including phonetics, phonology, morphology, syntax and semantics; the ethnography of communication; classification and cultural meaning; language, literacy and writing; and, anthropological approaches to the language emergence and change. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(TCSU ANTH 130) General Education: (MJC-GE: B, C)(CSU-GE: C2, D1)(IGETC: 3B, 4A)

ANTHR 105—PHYSICAL ANTHROPOLOGY LABORATORY 1 UNIT
Corequisite: or satisfactory completion of Concurrent enrollment in or satisfactory completion of 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 developmental 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. Field trips may be required. (A-F Only) Lab. Transfer: (CSU, UC)(TCSU ANTH 110) General Education: (MJC-GE: A)(CSU-GE: B3)(IGETC: 5B)

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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

ANTHR 130—ARCHAEOLOGY & 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(TCSU ANTH 150) General Education: (CSU-GE: D1)(IGETC: 4A)

ANTHR 140—MAGIC, WITCHCRAFT, AND RELIGION 3 UNITS
Formerly listed as ANTHR 140 - Magic, Witchcraft and Religion
Recommended for Success: Before enrolling in this course, students are strongly advised to complete ENGL 101 with minimum grade of C.
A cross-cultural study of the forms, functions and politics of supernatural beliefs and associated rituals in a diverse world. Emphasis on investigating belief systems and rituals within particular cultural contexts, including their emergence and the effect of their practice. Additional emphasis is on broad ethnographic comparison, to derive insight into the power and cultural work of religious and supernatural frameworks in various societies. Religious and supernatural worlds are also analyzed for their local and global connections with other Cultural institutions, movements, forms, polities, and process. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B)(CSU-GE: D1)(IGETC: 4A)

ANTHR 150—NATIVE PEOPLE OF NORTH AMERICA 3 UNITS
Introductory survey of Native North Americans. Protohistory will be examined, with emphasis on historic and contemporary culture groups and their politics, economics, and religions. The impact of non-Native peoples on indigenous cultures will be explored. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ANTHR 15) General Education: (CSU-GE: D1)(IGETC: 4A)

ANTHR 174—ANTHROPOLOGY SUMMER FIELD STUDIES 3 UNITS
Application of principles of anthropology through extended field studies at selected sites. Skills developed in cultural field studies, ethnographic data collection, archaeological artifact and site identification. Requires ability to work and study under rigorous conditions. Two maximum completions. Field trips are required. (A-F or P/NP) Lecture. Transfer: CSU

AP (Anatomy & Physiology)

Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/
Instructors: David Ward, Michele Monloux, Pamela Upton, Robert Droual, Sandra Uyeshiro

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 open to all students. Field trips are not required. (A-F or P/NP) Lecture. General Education: (MJC-GE: A)(CC BIOL 10)

AP 150—INTEGRATIVE ANATOMY AND PHYSIOLOGY 5 UNITS
Prerequisite: Satisfactory completion of BIO 116 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 organ, tissue and cellular interrelationships; 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. Field trips are not required. (A-F or P/NP) Lecture/Lab/Discussion. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B2, B3)(IGETC: 5B)
ARCH (Architecture)

**ARCH 100—INTRODUCTION TO ENGINEERING AND ARCHITECTURE  1 UNIT**
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) 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 ENGT 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 1  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: C1)(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 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 and practices 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 design and drafting. Topics include: a basic understanding of drafting skills, architectural nomenclature, design presentations, building materials, and a simple understanding of structure. Lecture/Laboratory.

**ART**

**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**
Also offered as CMPGR 213
Recommended for Success: Satisfactory completion of ART 102/CMPGR 202
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. Transfer: CSU

**ART 108—CERAMICS 1  3 UNITS**
Techniques of elementary clay construction and ornamentation; introduction to throwing techniques. Materials Fee Required. Four Maximum completions. Field trips might be required. (A-F or P/NP - Student choice) Lecture/Lab MJC Activities. Transfer: (CSU, UC) (CC ART 31)

**ART 109—CERAMICS 2  3 UNITS**
Prerequisite: Satisfactory completion of ART 108.
Hand building and pottery construction. Emphasis on throwing, form, and design. Materials Fee Required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

**ART 110—CERAMICS 3  3 UNITS**
Prerequisite: Satisfactory completion of ART 109.
Hand building, throwing techniques, and surface decoration, experiments in clay bodies, glazes and loading and unloading of kiln. Materials Fee Required. Field trips may be required. (A-F or P/ NP) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)
ART 119—COMPUTER GRAPHICS PORTFOLIO REVIEW 1 UNIT

Also offered as CMPGR 219

Prerequisite: This course follows the completed courses of the Computer Graphics majors/ certificate core requirements.

Prepares the student majoring 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 required. Lecture/Laboratory. (A-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. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU, UC General Education: (CSU-GE: C)

ART 121—BASIC DRAWING 2 3 UNITS

Prerequisite: Satisfactory completion of ART 120.

Further exploration of various drawing materials and techniques. Emphasis on composition and development of a personal approach to drawing. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU, UC (CC ART 9A)

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 completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU, UC General Education: (MJC-GE: C)

ART 124—COLOR AND DESIGN 1 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ART 120 with a minimum grade of C or better or previous drawing experience.

Design principles and color theory. Problems in two-dimensional form using various media. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU, UC General Education: (CSU-GE: C) (IGETC: 3A)

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 material 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. Lecture/Lab. MJC Activities. Transfer: CSU, UC

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. Materials Fee Required. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU, UC General Education: (CSU-GE: C 1)

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. Materials Fee Required. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU, UC

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. Materials Fee Required. Field trips may be required. (A-F or P/NP) Lecture/Lab. 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. Lecture/Laboratory. (A-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. (A-F or P/NP) Lecture/Lab. 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. (A-F or P/NP) MJC Activities. Transfer: CSU, UC (CC ART 25)

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. Field trips may be required. Lecture/Laboratory. (A-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: Three completions. Lecture/Laboratory. (A-F or P/NP) 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. (A-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 may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (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: C1) (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 may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 163—HISTORY OF MODERN ART 3 UNITS

Analysis of the arts through the study of painting, sculpture, architecture, and the history of Europe and the Americas from c. 1800 to the present. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

ART 164—HISTORY OF ART 1 3 UNITS

Analysis of great art epochs through study of paintings, sculpture, architecture and history from pre-historic times to the end of the Middle Ages. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC (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. (A-F or P/NP) Lecture. 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. 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 required. Lecture. Not offered every semester. **Transfer:** (CSU, UC) (CC ART 13) **General Education:** (MJC-GE: C)(CSU-GE: C1)(IGETC: 3A)

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)(CC ART 40) **General Education:** (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)

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. The class includes lectures, discussions, critiques, computer laboratory work. Field trips required. Three maximum completions. Material fee required. Lecture/Laboratory. **MJC Activities. Transfer:** (CSU, UC)

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 or P/NP) **MJC Activities. Transfer:** (CSU, UC)

ART 178B, C, D—ADVANCED PHOTOGRAPHY  2, 3, 4 UNITS
Prerequisite: Satisfactory completion of ART 172 or 186. Recommended for Success: Satisfactory completion of ART 168. 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

ART 179—PHOTOJOURNALISM  3 UNITS
Also offered as JRNAL 179
Prerequisite: Satisfactory completion of ART 170. 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) Lecture/Lab. **MJC Activities. Transfer:** CSU

ART 181—BASIC PHOTOGRAPHY  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) (MJC ART 181+182= CC ART 40)

ART 182—BASIC PHOTOGRAPHY  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, but: do not fulfill the CSU-GE requirement. Field trips required. Trustee receipt required to purchase course materials as needed. Lecture/Laboratory. **MJC Activities. Transfer:** (CSU, UC) (MJC ART 181+182= CC ART 40)

ART 185—INTERMEDIATE PHOTOGRAPHY  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)

ART 186—INTERMEDIATE PHOTOGRAPHY  1½ UNITS
Prerequisite: Satisfactory completion of ART 185
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)

ART 189—PHOTO LABORATORY TECHNOLOGY  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 completions allowed. Laboratory. **MJC Activities. Transfer:** CSU

ART 191—PHOTOGRAPHY LAB TECHNOLOGY  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 completions allowed. Laboratory. A-F or P/NP **MJC Activities. Transfer:** CSU

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) Lecture/Lab. **Transfer:** CSU

ASTRO (Astronomy)

Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/
Instructor: Kenneth Medei

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. **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: 5A)

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. Materials Fee Required. Field trips may be required. (A-F or P/NP) Lecture. **Transfer:** (CSU, UC) **General Education:** (MJC-GE: A)(CSU-GE: B1)(IGETC: 5A)
### AUBDY (Autobody)

**Dean (Interim):** Pedro Mendez  
**Office:** John Muir 258W  
**Phone:** (209) 575-6332  
**Department website:** www.mjc.edu/prospective/programs/teched/autobody/  
**Instructors:** Jeff Beebe

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### AUTC (Automotive Technology)

**Dean (Interim):** Pedro Mendez  
**Office:** John Muir 258W  
**Phone:** (209) 575-6332  
**Department website:** www.mjc.edu/prospective/programs/teched/autotech/  
**Instructors:** John Peterson, Gerald Wray

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**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 performance 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 failures. Lecture/Laboratory. Materials fee required. (A-F Only)  

**AUTEC 321**—A5: BRAKES SYSTEMS  
3½ UNITS  
Prerequisites: 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. Emphasis 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 component 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. Lecture/Lab.  

**AUTEC 368**—A6: AUTOMOTIVE ELECTRICITY/ELECTRONIC SYSTEMS  
3½ UNITS  
Prentice-hall, inc.  
Formerly listed as AUTEC 368 - A5: Automotive Electricity/Electronic Systems 1  
Corequisite: Concurrent enrollment in or satisfactory completion of AUTEC 311.  
Introduction to automotive electrical systems. Course 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 for electrical systems. Materials Fee Required. Field trips are not required. (A-F Only) Lecture/Lab.  

**AUTEC 369**—A6: AUTOMOTIVE ELECTRICITY 2  
4 UNITS  
Prerequisite: Satisfactory completion of AUTEC 368.  
Prepares students for Automotive Service Excellence A6 examination. Fundamentals of automotive electronics and electrical components including ignition, computers, light and horn circuits, indicating 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**—CLEAN AIR CAR COURSE  
5 UNITS  
Formerly listed as AUTEC 373 - 97 B.A.R. Clean Air Course  
Prerequisite: Satisfactory completion of AUTEC 320.  
Recommended for Success: Before enrolling in this course, students are strongly advised to contact the instructor teaching the class. This course is California Bureau of Automotive Repair approved for the basic (EB) and enhanced (EA) emission control licenses. It is designed especially for the automobile technician preparing for the California Smog License. Students who do not have one-year of trade experience in emissions/ tune-up or required courses and certificates will not be eligible to take the state licensing examination. Emphasis will be on operational principles of the emission control components and how to test them. B.A.R. requires a minimum of 90% attendance and 70% (C) grade for completion. Materials Fee Required Three maximum completions. field trips are not required. (A-F or P/NP) Lecture/Lab.  

**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 a transfer-level biology course. Field trips may be required. (A-F or P/NP) Lecture. General Education: (MJC-GE:A)  

**BIO 101**—BIOLOGICAL PRINCIPLES  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process.  
Corequisite: satisfactory completion of Concurrent enrollment in or satisfactory completion of CHEM 101.  

**BIO 111**—GENERAL BIOLOGY  
4 UNITS  

**BIO 114**—GENERAL ECOLOGY  
4 UNITS  
Formerly listed as BIO 114 - Introduction to Ecology  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.  
Introduction to the biological sciences and the general concepts and principles of ecology. Topics include organization and energetics of nature, natural interactions and biological diversity. Includes global and local ecosystems, scientific methods of ecological research, nutrient cycles and conditions of existence, and ecological assessment. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B2, B3)  

**BIO 115**—GENETICS, EVOLUTION, AND SOCIETY  
3 UNITS  

**BIO 116**—BIOLOGY: A HUMAN PERSPECTIVE  
4 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50 and satisfactorily complete MATH 70.  
An introduction to the principles of biology with an emphasis on humans. Topics covered include scientific method, cell structure and function, biochemistry, metabolism, heredity, biotechnology, evolution, anatomy and physiology of the human body, development of aging, disease, and ecology. BIO 116 is recommended for allied health students. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B2, B3)
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: (MJC-GE: A)(CSU-GE: B2)

BIO 130L—INTRODUCTION TO MARINE VERTEBRATES LABORATORY
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: (MJC-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—SPECIAL PROJECTS IN BIOLOGY ½,1,2,3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete (BIO 111, BIO 101, ZOOL 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 completions allowed in any combination of this course format. Not to exceed 6 units. Materials fee required. Not offered every semester. Transfer: CSU

BIO 180X,A,B—SPECIAL PROJECTS IN BIOLOGY ½,1,2 UNITS
Prerequisite: Concurrent enrollment in a college-level biology course.
Individual study, research, or project in the field of biology. Field trips may be required. Four completions allowed not to exceed 2 units in any combination of this course format. Lecture/Laboratory arranged. Materials fee may be required. (A-F or P/NP) Transfer: CSU

BOT (Botany)
Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/
Instructors: Elizabeth McInnes

BOT 101—GENERAL BOTANY 4 UNITS
Prerequisite: Satisfactory completion of BIO 101.

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)
Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/prospective/programs/bbss/
Instructors: Linda Kreppe, James McGarry, Nancy Sil

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

BUSAD 200—SPREADSHEET SKILLS FOR FINANCIAL ACCOUNTING 2 UNITS
Prerequisite: Concurrent or previous enrollment in BUSAD 201 or 320.
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 statement, 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 2A)
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. Lecture. Transfer: CSU (CC BUSAD 202)

BUSAD 203 — COMPUTER ACCOUNTING 3 UNITS
Prerequisite: Satisfactory completion of BUSAD 201 or 310.
Recommended for Success: BUSAD 202 or BUSAD 310 is used to satisfy the prerequisite.
Introduction to the use of the computer in accounting/bookkeeping. 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

BUSAD 218 — BUSINESS LAW 4 UNITS
Laws and regulations affecting managerial decisions; legal concepts and case analysis in the areas of ethics, employment, consumer transactions, competition, the environment, business torts and crimes, contracts, agency, business organizations, and international business. Field trips are not required. (A-F or P/NP) Lecture. Transfer: CSU (CC BUSAD 18)

BUSAD 230 — PERSONAL FINANCE 3 UNITS
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 liabilities; health, life, and disability insurance; retirement, social security, pensions, annuities; housing, savings and investment; taxes; estate planning. Lecture. Transfer: CSU

BUSAD 233 — INVESTMENTS 3 UNITS
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

BUSAD 240 — PRINCIPLES OF MANAGEMENT 3 UNITS
(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)

BUSAD 245 — PRINCIPLES OF MARKETING 3 UNITS
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)

BUSAD 248 — INTRODUCTION TO BUSINESS 3 UNITS
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 (CC BUSAD 20)

BUSAD 249 — BUSINESS INTERNSHIP 4 UNITS
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 intern 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. Lecture. Transfer: CSU

BUSAD 274 — HUMAN RESOURCES MANAGEMENT 3 UNITS
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

BUSAD 299A, B — MARKETING PROJECTS 1, 2 UNITS
Formerly listed as BUSAD 298A, 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

BUSAD 300 — MACHINE CALCULATION 2 UNITS
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.

BUSAD 310 — BOOKKEEPING 1 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete BUSAD 300 or satisfactorily complete 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, Accounting. Field trips are not required. (A-F or P/NP) Lecture.

BUSAD 319 — PAYROLL ACCOUNTING 3 UNITS
Prerequisites: Satisfactory completion of BUSAD 310 or 201.
Recommended for Success: Satisfactory completion of BUSAD 320 or BUSAD 310 is used as a prerequisite.
Completing the payroll register. Reporting payroll tax information to the federal and state government, 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.

BUSAD 320 — BOOKKEEPING 2 3 UNITS
Prerequisite: 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.

BUSAD 331 — BEGINNING COMPUTER ACCOUNTING SOFTWARE 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to know the complete accounting cycle.
A beginning course using features of computerized accounting software package(s). Will enable students to learn and apply the features of computerized accounting software to record, process and communicate financial accounting data for a service or product based company in the small business setting. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture.
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  
Recommended for Success: Before enrolling in this course, students are strongly advised to know the complete accounting cycle. Combination of BUSAD 331 and BUSAD 332. Beginning course in the use of computerized accounting software package(s). Students will learn and apply the features of computerized accounting software in order to record, process and communicate financial accounting data for a service company and merchandising corporation in the small business setting. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture.

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. (A-F or P/NP) Field trips may be required. Lecture. (Fall)

BUSAD 350—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 coursework.)  
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. Field trips are not required. (A-F or P/NP) Lecture.

CGR 201—GRAPHIC ARTS FUNDAMENTALS  
3 UNITS  
History of major printing process; 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) MJC Activities. Transfer: CSU

CGR 211—INDESIGN AND TYPOGRAPHY 1  
3 UNITS  
Basic fundamentals of typesetting and composition. Includes instruction in the printer’s point system, typeface identification and mark-up procedures. Operation of display and typesetting equipment. Note: PageMaker software. Field trips may be required. Lecture/Laboratory. (Fall) MJC Activities. Transfer: CSU

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 angle, 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) MJC Activities. Transfer: CSU

CGR 214—BINDERY  
3 UNITS  
Formerly listed as CGR 214 - Printing Presses and Bindery 1  
Introduction to bindery work: planning, paper cutting, folding, assembling, finish work and packaging. Die cutting materials, Scoring, Numbering, Foil stamping, and embossing Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CGR 221—IMAGE CAPTURE AND MANIPULATION  
3 UNITS  
Image Capture and Manipulation of images for the Communication Graphics field utilizing Digital Cameras, Scanners, and Printing output devices. Manipulation of images to meet client needs using Adobe Photoshop. Digital novice will learn key technical skills involving hardware/software of digital cameras, scanners, printers and image storage. Students will become familiar with digital solutions while attaining working knowledge in image-editing Adobe Photoshop software, printing technologies and digital imaging devices. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU

CGR 222—IMAGE ASSEMBLY AND PLATEMAKING  
1 UNIT  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 351 with a minimum grade of C or better satisfactorily complete CGR 214 with a minimum grade of C or better and.  
Beginning skills in the operation of Lithographic Offset Presses an Flexographic Web Press. Students will be required to print multi colored work and produce 2,000 or more copies in a final 3 hour lab. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CGR 223—LITHOGRAPHIC & FLEXOGRAPHIC PRESSES  
3 UNITS  
Formerly listed as CGR 223 - Printing Presses and Bindery 2  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CGR 214 with a minimum grade of C or better.  
Beginning skills in the operation of Lithographic Offset Presses an Flexographic Web Press. Students will be required to print multi colored work and produce 2,000 or more copies in a final 3 hour lab. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU

CGR 224—ILLUSTRATOR AND ELECTRONIC PUBLISHING  
3 UNITS  
Formerly listed as CGR 224 - Electronic Publishing Systems  
Illustrator training and Introduction to electronic publishing systems, to include text generation, computer-designed graphics. Typographical applications and output devices, to include imagerseters wide format, 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. Three maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU

CGR 225—PRODUCTION SCREEN PRINTING  
2 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to have some experience with Illustrator InDesign, or Photoshop to complete lab projects. Fundamentals of production screen printing on multimedia or substrates. Screen printing with single and multicolor with hairline registration. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CGR 230—GRAPHIC DESIGN  
3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ART 120 and CGR 211 and CGR 224.  
Introduces students to graphic design as a form of visual communication through the use of type, image, form, and color. Projects explore design processes in two dimensions; visual identity and communication, creative problem solving, and basic design practices. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU
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. Transfer: CSU

CGR 331 — INDESIGN AND TYPOGRAPHY 2  
3 UNITS  
Formerly listed as CGR 331 - Typography 2  
Prerequisite: Satisfactory completion of CGR 211 with a minimum grade of C or better. InDesign and Typography 2 covers advanced skills in the page layout software InDesign and advanced skills of typography. History of type, and the use of InDesign to perform advanced typography skills to produce outstanding, flyers, brochures, posters, etc. Field trips may be required. (A-F or P/NP) Lecture/Lab.

CGR 332 — ADVANCED PRESSES  
3 UNITS  
Formerly listed as CGR 332 - Production Presse and Bindery  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CGR 214 with a minimum grade of C or better. Advanced skills in the operation of Lithographic press and Flexographic press. Printing four colors in tight registration using a Lithographic press and a Flexographic press. Producing printed pieces for the college and meeting industry standards on those printing projects. Field trips may be required. (A-F or P/NP) Lecture/Lab.

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 (proofing 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)(Fall) MJC Activities.

CGR 350 — GRAPHIC COMMUNICATION INTERNESHIP  
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 395 — COMMUNICATION GRAPHICS OPEN LAB  
1 - 3 UNITS  
Prerequisite: Satisfactory completion of CGR 211 and/or CGR 221 and/or CGR 224 and/or CGR 214 and/or CGR 223. Provides access to Communication Graphics laboratory setting for advanced students for the purpose of continued skills development applicable to production processes in Design and Printing. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab.

COURSES OFFERED

CHEM 101 — GENERAL CHEMISTRY 1  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the 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) (TCSU CHEM 110) (CC CHEM 1A) General Education: (MJC-GE: A)(CSU-GE: B1, B3)(IGETC: 5A)

CHEM 102 — GENERAL CHEMISTRY 2  
5 UNITS  
Prerequisite: Satisfactory completion of CHEM 101. Continuation of Chemistry 101 emphasizing kinetics, solutions, equilibrium, acids and bases, electrochemistry, thermodynamics, nuclear chemistry, coordination chemistry and descriptive chemistry. Field trips are not required. (A-F or P/NP) Lecture/Lab /Discussion. Transfer: (CSU, UC) (TCSU CHEM 120) (CC CHEM 1B) General Education: (MJC-GE: A)(CSU-GE: B1, B3) (IGETC: 5A)

CHEM 112 — ORGANIC CHEMISTRY 1  
5 UNITS  
Prerequisite: Satisfactory completion of CHEM 102. Nomenclature, structure, reactions and spectroscopy of carbon containing compounds. Laboratory emphasizes basic techniques of synthesis, purification, and identification of organic compounds. Field trips are not required. (A-F or P/NP) Lecture/Lab /Discussion. Transfer: (CSU, UC) (TCSU CHEM 120) (CC CHEM 1B) General Education: (MJC-GE: A)(CSU-GE: B1, B3) (IGETC: 5A)

CHEM 113 — ORGANIC CHEMISTRY 2  
5 UNITS  
Prerequisite: Satisfactory completion of CHEM 112. CHEM 113 is the second semester in a yearlong sequence of an organic chemistry course for science majors. Topics to be covered include nomenclature, physical properties and reactions of aromatic compounds, aldehydes, ketones, carboxylic acids, carboxylic acid derivatives, amines and bio-organic compounds. Mechanisms to be addressed are electrophilic and nucleophilic aromatic substitution and nucleophilic acyl substitution and addition. Oxidation and reduction processes will be investigated more thoroughly. Course concludes with an introduction to biomolecules. Concepts from CHEM 112 will be reinforced. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B1, B3)(IGETC: 5A)

CHEM 142 — PRE-GENERAL CHEMISTRY  
3 UNITS  
Corequisite: or satisfactory completion of Concurrent enrollment in or satisfactory completion of MATH 90 or qualification by the MJC assessment process. Intended to prepare students for General Chemistry with an emphasis on problem solving using unit analysis. Included are topics on classification of matter, nomenclature, gas laws, chemical formula, molar mass, empirical formula, chemical reactions, atomic and molecular structure, measurements and the metric system, chemical reactions and stoichiometry, aqueous solutions and fundamentals of acids and bases. Field trips are not required. (A-F or P/NP) Lecture /Discussion. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B1, B3)(IGETC: 5A)

CHEM 143 — INTRODUCTORY COLLEGE CHEMISTRY  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 70 or qualification by the MJC assessment process. Designed to meet the requirements for certain nursing, dental hygiene, physical therapy, agriculture and forestry programs. Principles of general, inorganic chemistry with an introduction to organic chemistry. Uses the factor-label method of problem solving. Credit not granted to students who have completed CHEM 142. Field trips are not required. (A-F or P/NP) Lecture/Lab /Discussion. Transfer: (CSU, UC) (TCSU CHEM 130) (TCSU CHEM 210) (CC CHEM 10) General Education: (MJC-GE: A)(CSU-GE: B1, B3) (IGETC: 5A)
### CHEM 144—Fundamentals of Organic & Biochemistry  4 UNITS
Prerequisite: Satisfactory completion of CHEM 143.
Basic principles of organic and biochemistry. Uses inductive and deductive problem solving methods. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) (TCSU CHEM 140) (TCSU CHEM 210) (CC CHEM 11) 
**General Education:** (MUC-GE A)(CSU-GE B1, B3) (IGETC: SA)

### CHEM 150—Exploring Our Chemical Environment  3 UNITS
Chemical perspective of environmental topics including acid rain and global warming. 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC CHEM 20) 
**General Education:** (MUC-GE A)(CSU-GE B1) (IGETC: SA)

### CHEM 164—Introductory Chemistry Laboratory  2 UNITS
Corequisite: satisfactory completion of Concurrent enrollment in or satisfactory completion of 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 Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) 
**General Education:** (MUC-GE A)(CSU-GE B3)(IGETC: SA)

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### CLART (Culinary Arts)

**Dean:** Maurice McKinnon, EdD  
**Division Office:** John Muir Hall, Room 157  
**Phone:** (209) 575-6343  
**Division Website:** [www.mjc.edu/prospective/programs/fcs/index.html](http://www.mjc.edu/prospective/programs/fcs/index.html)

#### 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 completions allowed. Materials fee required. (A-F or P/NP) Lecture. 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 roasting, grilling and braising 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) Lecture/Lab.

#### CLART 302—Culinary Academy 2  14 UNITS
Prerequisite: Satisfactory completion of CLART 301
Daily production will emphasize techniques of specialty desserts, pastries, gâteau 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) Lecture/Lab.

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### CLDDV (Child Development)

**Dean:** Maurice McKinnon, EdD  
**Division Office:** John Muir Hall, Room 157  
**Phone:** (209) 575-6343  
**Division Website:** [www.mjc.edu/prospective/programs/fcs/index.html](http://www.mjc.edu/prospective/programs/fcs/index.html)

#### CLDDV 48A,B—Fundamental Communication Skills for Child Development Majors  1-2 UNITS
Formerly listed as CLDDV 50A, B
Recommended for success: Enrolment 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—Principles and Practices of Teaching Young Children  3 UNITS
Formerly listed as CLDDV 101—Introduction to Early Childhood Education
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Examination of the underlying theoretical principles of developmentally appropriate practices applied to educational programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, emotional, creative, and intellectual development for children 0-8. Review of the historical roots of early educational programs and the evaluation of the professional practices promoting advocacy, ethics, and professional identity. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 3)

#### CLDDV 103—Child Growth and Development  3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. Emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 4)

#### CLDDV 104—Child Growth and Development: Conception Through Early Childhood  2 UNITS
Formerly listed as CLDDV 104—Child Growth and Development—Conception
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
First half of CLDDV 103—Examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through early childhood. Emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC) 
**General Education:** (MUC-GE B, E)(CSU-GE B3, E)(IGETC: 5A)
CLDDV 105 — CHILD GROWTH AND DEVELOPMENT - 2 UNITS
LATE CHILDHOOD THROUGH ADOLESCENCE
Formerly listed as CLDDV 105 - Child Growth and Development - Late Childhood
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Second half of CLDDV 103 - Late childhood through late adolescence: Examines the major physical, psychosocial, and cognitive/linguistic developmental milestones for children, both typical and atypical, from late childhood through late adolescence. Emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigatory research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MKG: B, E)(CSU-GE: E)

CLDDV 107 — INTRODUCTION TO CURRICULUM - 3 UNITS
Formerly listed as CLDDV 107 - Introduction to Child Development Curriculum
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age eight. Examine a teacher’s role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies emphasizing the essential role of play. Overview of content areas will include, but not be limited to: principles of learning, models of curricular philosophies and programs, and integration of domains of development emphasizing language and literacy, social and emotional learning, sensory learning, art and creativity, math, and science, supporting inclusion of children with special needs. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

CLDDV 109 — CHILD - FAMILY - COMMUNITY - 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Examination of the development of the child in a societal context focusing on the interrelationship of family, early care and education, elementary education, peer group, community, and media, emphasizing historical and socio-cultural factors including culture, religion, economics, and politics. Processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower children and their families. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 22)

CLDDV 111 — HEALTH, SAFETY, AND NUTRITION - 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health, safety, and nutrition. Key components that ensure physical health, mental health, and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning, and program development for all children. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 22)

CLDDV 121 — GUIDANCE OF YOUNG CHILDREN - 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50 and satisfactorily complete CLDDV 101 and satisfactorily complete CLDDV 103 or CLDDV 104 and CLDDV 105.
Introduction to positive guidance and discipline approaches in educational and family settings. Exploration of the underlying causes of misbehavior. Appropriate and effective techniques that support socio-emotional, cognitive, psychological, and physical health and development. Understanding of individual parent, teacher, and caregiving styles and attitudes relative to behavior of children. Three maximum completions: Field trips may be required. (A-F or P/NP) 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) Lecture. 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.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Infant and toddler development 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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU (CC CHILD 25)

CLDDV 126C,D,E — INCLUSION SPECIAL NEEDS PRACTICUM - 3 - 5 UNITS
Prerequisite: Satisfactory completion of CLDDV 103.
Corequisite: Concurrent enrollment in or satisfactory completion of CLDDV 121.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Limitations on Enrollment: TB clearance is required, Title 22.
Child-centered, play-oriented approaches to student teaching experience under guided supervision with toddlers and/or preschool-aged children with an identified disability. Build a comprehensive understanding of children and families through individualized, relationship-based (DIR Floortime) 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 IFSP/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. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CLDDV 127B,C,D,E — INFANT/TODDLER PRACTICUM - 2-5 UNITS
Concurrent enrollment in or satisfactory prior completion of CLDDV 125.
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 infants and toddlers 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 IFSP goals and may include participation in an educational meeting. CLDDV 130 — Supervised Field Experience — may NOT be used as a substitute for lab practicum. Course is repeatable up to a maximum of 5 units earned. Field trips may be required. (A-F or P/NP) Lecture/Laboratory. Transfer: CSU (CC CHILD 16)

CLDDV 130 — SUPERVISED FIELD EXPERIENCE - 3 UNITS
Formerly listed as CLDDV 245
Prerequisite: 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 131 — LEARNING ENVIRONMENTS FOR SCHOOL-AGE CHILDREN - 3 UNITS
Formerly listed as CLDDV 126
Prerequisite: Satisfactory completion of 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.
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 195 — CHILD GROWTH AND DEVELOPMENT - 2 UNITS
LATE CHILDHOOD THROUGH ADOLESCENCE
Formerly listed as CLDDV 105 - Child Growth and Development - Late Childhood
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.
Second half of CLDDV 103 - Late childhood through late adolescence: Examines the major physical, psychosocial, and cognitive/linguistic developmental milestones for children, both typical and atypical, from late childhood through late adolescence. Emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigatory research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development at various stages. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MKG: B, E)(CSU-GE: E)
CLDDV 128B,C,D,E—PRESCHOOL PRACTICUM 2 - 5 UNITS
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 satisfactorily complete or be concurrently enrolled in CLDDV 121.

Limitations on Enrollment: TB clearance is required.

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 practice. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CLDDV 130B,C,D—SUPERVISED FIELD EXPERIENCE 2-4 UNITS
Formerly listed as CLDDV 260

Limitations on Enrollment: 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 practice. 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 250
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 records, reports, health and safety, finances, staff management, curriculum development, spatial and equipment requirements, and parent/community relationships from the administrator’s point of view. Course is not repeatable. Lecture. Transfer: CSU

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 Recommended for Success 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. (A-F or P/NP) Lecture. Transfer: CSU

CLDDV 154—ADULT RELATIONSHIPS AND MENTORING IN SCHOOLS 2 UNITS
Formerly listed as CLDDV 264
Prerequisite: Satisfactory completion of CLDDV 101; and 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: CSU General Education: (MUC-GE B)

CLDDV 163—WORKING WITH CHILDREN WITH SPECIAL NEEDS 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.

Introduction to inclusion of children with special needs, from infancy to adolescence in the home, 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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

CLDDV 165—CHILDREN AT RISK 3 UNITS
Recommended for Success: Satisfactory completion of ENGL 50

Examines risk 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 neuropsychological 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) Lecture. Transfer: CSU

CLDDV 167—OBSERVATION AND ASSESSMENT 3 UNITS
Prerequisite: Satisfactory completion of 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.

Focus on appropriate use of assessment and observation strategies to document development, growth, play, and learning to join with families and professionals in promoting children’s success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. Field trips may be required. (A-F or P/NP) Lecture. 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) Lecture. Transfer: CSU

CLDDV 201—HEALTH AND SAFETY PRACTICES IN PROGRAMS FOR CHILDREN 3 UNITS
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 232—HEALTHY CAREGIVER 3 UNITS
Formerly listed as FAMLF 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
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CLDDV 103 or satisfactorily complete CLDDV 104 and satisfactorily complete CLDDV 105 and satisfactorily complete ENGL 50.

Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media, and schooling. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU General Education: (MUC-GE B) (CSU-GE D7)

CLDDV 266—MENTOR TEACHER SEMINAR ½ UNIT
Formerly listed as CLDDV 266 - Mentor Seminar

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.

Master Teachers and Site Supervisors attend seminars to explore issues related to their role as supervisors and mentors of early childhood teachers and child development students. Four completions allowed. Field trips may be required. (Non-Graded course) Lecture. Transfer: (CSU)
CLDDV 267 — DIRECTOR SEMINAR  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50. 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. Four completions allowed. Field trips may be required. (Non-Graded course) 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 280 — SCHOOL-AGE DEVELOPMENT  
3 UNITS
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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU)

CLDDV 281 — SCHOOL-AGE PROGRAM AND CURRICULUM  
3 UNITS
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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU)

CLDDV 290C — 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
Recommended for Success: Satisfactory completion of ENGL 50, CLDDV 103, or CLDDV 104 and CLDDV 105
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 child 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 sequence of two courses. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU)

CLDDV 295 — MATH, BIRTH TO K: THEORY AND PRACTICE  
3 UNITS
Recommended for Success: Satisfactory completion of ENGL 50, CLDDV 103, or CLDDV 104 and CLDDV 105
Introduction to the methods of teaching math to children (birth to Kindergarten). Theories on the developing mind and the benefit of mathematical understanding to numeracy as well as overall child development. Theoretical models of the development of early numeracy, including Montessori, Nienhuis, Cognitivism, and Piaget. 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 296 — MATH, BIRTH TO K: APPLICATION  
3 UNITS
Also offered as MUST 107
Prerequisite: Satisfactory completion of CLDDV 295/MUST 105.
Application of the methods of teaching math to children (birth to Kindergarten) at an infant/toddler or preschool center with instructor supervision. Students will continue to draw connections between basic math 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)

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.

CMPET (Computer Electronics)

Dean (Interim): Pedro Mendez
Office: John Muir 258NW
Phone: (209) 575-6332
Division website: www.mjc.edu/prospective/programs/tech/elec-tech/
Instructors: Adrian De Angelis, Jim Howen, Timothy Vaughan

CMPET 206 — PERSONAL COMPUTER ASSEMBLY, UPGRADING AND REPAIRING  
3 UNITS
Prerequisite: Satisfactory completion of CMPSC 201 or equivalent.
An introductory course in assembling, upgrading, and repairing of personal computer systems. Emphasis on hands-on laboratory activities with personal computer hardware. Operating principles of computer subsystems and peripheral devices. Use of diagnostic software and hardware tools. Multi-user system setup and maintenance. Lecture/Laboratory. Materials fee required. Transfer: (CSU)

CMPET 207 — INTERMEDIATE PERSONAL COMPUTER SERVICING WITH A+ CERTIFICATION TRAINING  
3 UNITS
Prerequisite: Satisfactory completion of CMPET 206 or CMPET/ELTEC 214.
Intermediate principles and practices of personal computer systems maintenance, upgrading and repair with an emphasis on preparation for A+ Certificate Technician Certification administered by CompTIA. Contents include hardware and operating system setup, adding peripherals, communication and networking fundamentals, disaster recovery and supporting Windows NT. Lecture/Laboratory. Materials fee required. Transfer: (CSU)

CMPET 212 — DIGITAL PRINCIPLES AND CIRCUITS  
3 UNITS
Prerequisite: Satisfactory completion of CMPET 210 or concurrent enrollment.
Also offered as ELTEC 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)

CMPET 214 — MICROPROCESSOR PROGRAMMING AND INTERFACING  
4 UNITS
Prerequisite: Satisfactory completion of ELTEC 212/CMPET 212
Also offered as ELTEC 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)

Offices: 197
CMPET 232—INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS 2 UNITS

Also offered as ELTEC 232
Formerly listed as CMPET 232 - Introduction to Programmable Logic

Introduction to the basic concepts of Programmable Logic Controllers. Installation, programming, maintaining, and trouble shooting of micro-sized programmable logic controller systems. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CMPET 234—ADVANCED TOPICS IN PROGRAMMABLE LOGIC CONTROLLERS 2 UNITS

Recommended for Success: Satisfactory completion of CMPET 232 or equivalent course.

Advanced study of programmable logic controllers and complete controller systems. Emphasis on component selection, design and operation of industry-like controller systems. Lecture/Laboratory. (A-F Only) Transfer: CSU

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.

Advanced study of the communication between networked devices. Introduction to networking. 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 DEVICENET 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)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: my.edu/prospective/programs/fbiss/
Instructors: Joel Hagen, Brian Sinclair

CMPGR 213—APPLIED COMPUTER GRAPHICS 3 UNITS

Also offered as ART 103
Recommended for Success: Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files. Concepts and techniques in computer graphics as related to fine and applied art applications. Three maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Lab. 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: Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files.

The use of a computer as a vehicle for preparing, producing, and controlling the presentation of visuals within the business environments. 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. (A-F or P/NP) Lecture/Lab. Transfer: CSU (CC CMPSC 11)

CMPGR 217—COMPUTER ILLUSTRATION SOFTWARE 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files.

Introduction to illustration software as applied to visual and data presentations. 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. Two maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CMPGR 219—COMPUTER GRAPHICS PORTFOLIO REVIEW 1 UNIT

Also offered as ART 119
Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how your computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Prepares the student majoring in or receiving a certificate in Computer Graphics, Commercial, or Fine Art with the necessary visual and business skills to develop a portfolio; emphasizes the creative and applied business needs for individuals entering their respective professional field. Field trips may be required. (A-F Only) Lecture. Transfer: CSU

CMPGR 225—3D GRAPHICS AND ANIMATION 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how your computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Graphic and animation techniques utilizing microcomputers and 3D software. 3D modeling, scene composition, materials editing, object and camera movement, character development, and story boarding will be explored. Students will have intensive hands-on experience with IBM or MAC graphic systems and related peripheral devices. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CMPGR 226—3D GRAPHICS AND ANIMATION 2 3 UNITS

Recommended for Success: Before enrolling in this course, students are strongly advised to have successfully completed CMPGR 225.

Continued development of 3D modeling and animation skills. Storyboarding, integration of 3D software with other industry standard applications. Finished animation production techniques. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CMPGR 235—BEGINNING PHOTOSHOP 3 UNITS

Formerly listed as Image Manipulation Software
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPGR 202/ART 102.

Introduction to the techniques and technology of digital imaging and image manipulation software. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Also offered as ELTEC 234

Formerly listed as CMPET 232 - Introduction to Programmable Logic

Introduction to the basic concepts of Programmable Logic Controllers. Installation, programming, maintaining, and trouble shooting of micro-sized programmable logic controller systems. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how a computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Transfer: CSU

Formerly listed as Image Manipulation Software
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPGR 202/ART 102.

Introduction to the techniques and technology of digital imaging and image manipulation software. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Also offered as ELTEC 234

Formerly listed as CMPET 232 - Introduction to Programmable Logic

Introduction to the basic concepts of Programmable Logic Controllers. Installation, programming, maintaining, and trouble shooting of micro-sized programmable logic controller systems. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how a computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Transfer: CSU

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Introduction to the basic concepts of Programmable Logic Controllers. Installation, programming, maintaining, and trouble shooting of micro-sized programmable logic controller systems. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how a computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Transfer: CSU

Formerly listed as Image Manipulation Software
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPGR 202/ART 102.

Introduction to the techniques and technology of digital imaging and image manipulation software. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Also offered as ELTEC 234

Formerly listed as CMPET 232 - Introduction to Programmable Logic

Introduction to the basic concepts of Programmable Logic Controllers. Installation, programming, maintaining, and trouble shooting of micro-sized programmable logic controller systems. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers including: turning on and off a computer system correctly; starting programs, moving and resizing windows, the Start Menu, understanding how a computer is organized; manipulating a mouse, including selecting, double clicking, and dragging items; naming, saving, and deleting files; using portable flash memory and other common storage devices.

Transfer: CSU
**CMPGR 236—ADVANCED PHOTOSHOP**
3 UNITS
Formerly listed as Advanced Photoshop Applications
**Recommended for Success:** Before enrolling in this course, students are strongly advised to have satisfactorily completed CMPGR 235.
Advanced skills in Adobe Photoshop including layout and publication, image processing, fine art and illustration. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. **Transfer:** CSU

**CMPGR 252—DESKTOP PUBLISHING FOR COMPUTER GRAPHICS**
3 UNITS
**Recommended for Success:** Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files. 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. Field trips may be required. (A-F or P/NP) Lecture/Lab. **Transfer:** CSU

**CMPGR 262—EXPLORE THE WORLD WIDE WEB**
1 UNIT
Introduction to the World Wide 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 (EC CMPSC 10)

**CMPGR 263—INTERNET LITERACY**
3 UNITS
**Recommended for Success:** Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files. Provides the conceptual background and the online skills needed to become Internet literate. Covers Internet services: e-mail, lstserv, 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. Field trips are not required. (A-F or P/NP) Lecture/Lab. **Transfer:** CSU

**CMPGR 264—PUBLISHING ON THE WORLD WIDE WEB**
3 UNITS
**Recommended for Success:** Satisfactory completion of CMPGR 262, CMPSC 201 Development, components, and impact of the World Wide Web. Publishing of personal and professional documents for access on the Web. Use of Web browsers and supporting applications including editors, converters, graphical generators and manipulators. Coverage of hypertext (HTML) and portable document format (PDF). Search tools and strategies for information and resource retrieval, and downloading files from FTP sites. Introduces design concepts. Extensive hands-on lab experience. Lecture/Laboratory. Materials fee required. **Transfer:** CSU (CC CMPSC 12) **General Education:** (MJC-GE D2)

**CMPGR 265—MULTIMEDIA ON THE WORLD WIDE WEB**
3 UNITS
**Recommended for Success:** Before enrolling in this course, students are strongly advised to have satisfactorily completed CMPGR 264.
Intermediate course covering multimedia components of the World Wide Web. Development with animation, sound, and video. Emphasis on further development of scripting techniques and skills for advanced features for web pages. Extensive hands-on lab experience. Field trips may be required. (A-F or P/NP) Lecture/Lab. **Transfer:** CSU **General Education:** (MIC-GE D2)

**CMPGR 267—DREAMWEAVER IN WEB SITE DESIGN**
3 UNITS
**Recommended for Success:** Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files. 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. Two maximum completions. Field trips are not required. (A-F or P/NP) Lecture/Lab. **Transfer:** CSU

**CMPGR 268—FLASH: WEB GRAPHICS AND ANIMATION 1**
3 UNITS
**Recommended for Success:** Satisfactory completion of CMPGR 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 (CC CMPSC 19)

**CMPGR 269—FLASH: WEB GRAPHICS AND ANIMATION 2**
3 UNITS
**Prerequisite:** Satisfactory completion of CMPGR 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, scriptable masks, embedded video, streaming and 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

**CMPGR 284—DESKTOP VIDEO ANIMATION**
3 UNITS
**Recommended for Success:** Before enrolling in this course, students are strongly advised to be able to demonstrate basic computer skills such as creating and navigating folders and files. Fundamental skills in animation and special effects concepts and techniques utilizing computers and digital video media. Three maximum completions. Field trips are not required. (A-F or P/NP) **MJC Activities. Lecture/Lab. Transfer:** CSU

**CMPGR 287—INTRODUCTION TO MULTIMEDIA**
3 UNITS
**Recommended for Success:** Satisfactory completion of Basic Computer literacy course such as CMPSC 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

**CMPGR 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 completions allowed for a maximum of 6 units in any combination. Lecture or Lecture/Lab. **Transfer:** CSU

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**CMPSC (Computer Science)**

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/prospective/programs/bbss/
Instructors: Brian Larson, Dale Phillips, Kathleen Short, Chris Vaughn, Lloyd Vaught, John Zamora

**CMPSC 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) **General Education:** (MJC-GE D2)(CSU-GE A3)

**CMPSC 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 computers. Three maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Lab. **Transfer:** (CSU, UC) **General Education:** (MJC-GE D2)
CMPSC 202—BUSINESS INFORMATION SYSTEMS  3 UNITS
Prerequisite: Satisfactory completion of CMPSC 201 and BUSAD 201 or BUSAD 310.
Introduction to design, development, and use of information system models to improve managerial decision making. Study of information systems hardware and software, advanced computer systems, systems analysis and planning, system 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. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)(TCSU IS 120)

CMPSC 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. Field trips may be required. (A-F or P/NP) Lecture/Transfer: CSU General Education: (MIC-GE-D2)

CMPSC 204—INTRODUCTION TO PROGRAMMING  3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfy completely MATH 90.
First course in computer programming for students with little or no programming experience. General computer literacy issues useful for technicians such as computer hardware, software development, operating systems, and telecommunications. Beginning problem-solving techniques, documentation, algorithm design, control structures, as well as program coding using an appropriate beginning programming language. Data manipulation, logic, looping, program testing, and program maintenance will be stressed. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)

CMPSC 205—PROBLEM SOLVING AND PROGRAMMING 1  4 UNITS
Prerequisite: Satisfactory completion of CMPSC 204.
First course for Computer Science transfer majors, but open to all students. Emphasizes object-oriented programming, algorithmic design, and problem solving skills for computer science. Software engineering skills will be emphasized. Solutions will be implemented using a high-level object-oriented programming environment such as, C++, C#, or JAVA. Extensive programming projects demonstrating problem solving and implementation skills will be assigned throughout the semester. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)(CC CMPSC 22)(TCSU CSCI 110) General Education: (MIC-GE-D2)

CMPSC 206—INTRO TO UNIX/LINUX SYST & PROGRAMMING  3 UNITS
Formerly listed as CMPSC 206 - Intro to UNIX/Linux Syst & Progr
Prerequisite: 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, and C and C++ programming, and recent developments in UNIX and the X Window graphical user interface. Extensive hands-on experience using UNIX operating system and programming within the UNIX environment. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)(CC CMPSC 9)

CMPSC 210—UNIX/LINUX ADMINISTRATION  3 UNITS
Prerequisite: Satisfactory completion of CMPSC 206.
This course guides students through the fundamental responsibilities of advanced UNIX/Linux system administration. Topics include file system monitoring, file and directory archiving, user account management, shutdown and rebooting sequences, system backups, system log responsibilities, system security and, configuration, monitoring and implementation of Web/DNS/Mail servers. Management, shutdown and rebooting sequences, system backups, system log responsibilities, system security and, configuration, monitoring and implementation of Web/DNS/Mail servers. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC) (CC CMPSC 28) General Education: (MJC-GE-D2)

CMPSC 213—PROGRAMMING WITH VISUAL BASIC  3 UNITS
Prerequisite: Satisfactory completion of CMPSC 204 with a minimum grade of C or better.
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. Hands-on experience using microcomputers. Extensive interaction with computers will be expected. Three maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)(CC CMPSC 28) General Education: (MJC-GE-D2)

CMPSC 214—ADVANCED VISUAL BASIC  3 UNITS
Prerequisite: Satisfactory completion of CMPSC 213 with a minimum grade of C or better.
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. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)

CMPSC 216—SCRIPT PROGRAMMING FOR THE WEB  3 UNITS
Formerly listed as CMPSC 216 - Javascript Programming for the Internet
Prerequisite: Satisfactory completion of CMPSC 204.
Developing World Wide Web applications with HTML and scripting tools such as python, java script, ruby and perl. 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. Three maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)

CMPSC 219—DISCRETE STRUCTURES FOR COMPUTER SCIENCE  4 UNITS
Prerequisite: Satisfactory completion of CMPSC 205 and MATH 121.
Introduction to computational topics essential for work in Computer Science. Topics include: number bases, induction, sets, relations, functions, congruence, recursion, combinations and permutations, probability, graphs, trees, logic, Boolean algebra, and proof techniques. Computing related problems and examples are integrated throughout the course. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC) General Education: (MIC-GE-D2) (CSU-GE-B4)

CMPSC 220—DATABASE SERVER ADMINISTRATION  3 UNITS
Formerly listed as CMPSC 220 - SQL Server Administration
Recommended for Success: Before enrolling in this course, students are strongly advised to have prior experience working with computer server systems or first complete CMPSC 264 - Windows Server OS course. Provides students with the knowledge and skills required to install, configure, administer, and troubleshoot various SQL Server client/server database management systems. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture/Transfer: CSU

CMPSC 225—DATABASE PROGRAMMING WITH SQL  3 UNITS
Formerly listed as CMPSC 225 - SQL Database Implementation
Prerequisite: Satisfactory completion of CMPSC 275 or CMPSC 204.
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. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture/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, UC) (CC OFFICE 141)

CMPSC 241—ASSEMBLY LANGUAGE PROGRAMMING  4 UNITS
Prerequisite: Satisfactory completion of CMPSC 205.
First course in computer architecture and assembly language programming. Data representation and manipulation, CPU organization and memory, addressing modes, logic and control, table processing, and 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. Two maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC) General Education: (MIC-GE-D2)

CMPSC 261—PROBLEM SOLVING AND PROGRAMMING 2  4 UNITS
Prerequisite: Satisfactory completion of CMPSC 205.
Introduction to data structures implemented using object-oriented design. 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. Emphasis on algorithm efficiency, recursive algorithms, and linked lists, stacks, queues, and trees. Field trips may be required. (A-F or P/NP) Lecture/Transfer: (CSU, UC)(TCSU CSCI 120)(CC CMPSC 24) General Education: (MJC-GE-D2)
CMPSC 263 — NETWORKING ESSENTIALS 4 UNITS  
Prerequisite: Satisfactory completion of CMPSC 201.  
Concepts of networking technologies. Includes networking standards and the OSI model, transmission basics and media, TCP/IP protocols, topologies and Ethernet standards, hardware, 
WANs and remote connectivity, wireless networking, network operating systems, voice and video 
over IP, network security, network troubleshooting, integrity and availability of networks, and 
network management. Designed to assist individuals preparing for various certifications. Hands-on 
computer assignments required. Materials Fee Required. Field trips may be required. (A-F or P/NP) 
Lecture/Lab. Transfer: CSU

CMPSC 264 — WINDOWS SERVER OS 3 UNITS  
Prerequisite: Satisfactory completion of CMPSC 263.  
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. (A-F or P/ NP)  
Lecture/Lab. Transfer: CSU General Education: (MIC-GE: D2)

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/ 3 UNITS  
MICROCOMPUTER  
Prerequisite: Satisfactory completion of CMPSC 203.  
Introduction to database management systems (DBMS). Instruction on the design, setup and 
maintenance of a DBMS. Applications in inventory control, mailing lists, report, report construction 
and format, sorting and indexing operations, general file relationships and information retrieval. 
Hands-on experience using a microcomputer. Emphasis on desktop DBMS such as Microsoft Access. Four completions allowed. Field trips may be required. (A-F or P/ NP) Lecture/Lab. Transfer: 
CSU General Education: (MIC-GE: D2)(CC CMPSC 55)

CMPSC 276 — WEB DATABASE DEVELOPMENT 3 UNITS  
Formerly listed as CMPSC 276 - Introduction to Data Warehousing  
Prerequisite: Satisfactory completion of CMPSC 275 or CMPSC 225 or CMPSC 220.  
Introduction to Web Database development. Emphasizes heterogeneous database design, 
optimization and reporting in a web database environment. This class will use industry standard 
tools and techniques with a variety of databases and programming tools. Four completions al-
lowed. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU General Education: 
(MIC-GE: D2)

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 on 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 
CMPPSC 30)

CMPSC 281 — ADVANCED NETWORKING & SECURITY 3 UNITS  
Prerequisite: Satisfactory completion of CMPSC 264.  
Technical study of security for networks. Includes assessing security risks, planning administrative 
access and user accounts, securing communication channels, securing file and print resources; 
secure access to remote users and offices, secure 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. (A-F or P/NP) 
Lecture/Lab. Transfer: CSU

CMPSC 289 — DIRECTORY SERVICES 3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to 
either complete CMPSC 264, Windows Server, or have experience managing business server systems.  
Technical study of 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 direc-
tory services design, group policy design, design topology and locations, replication and disaster 
recovery. Hands-on computer assignments required. Four completions allowed. Field trips may be 
required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

CMPSC 291 — WINDOWS PROGRAMMING WITH VISUAL STUDIO 4 UNITS  
Formerly listed as CMPSC 291 - Windows Programming With Visual C++  
Prerequisite: Satisfactory completion of CMPSC 205.  
Windows Programming using the Microsoft Visual Studio environment. Review of object-oriented 
programming and problem solving concepts. Emphasis on designing user applications, event- 
driven programming, debugging and exception handling, object-based file handling, database 
access, web-based and smart device applications, and advanced programming techniques. 
Hands-on computer programming projects will be required. Field trips may be required. (A-F or P/ NP)  
Lecture/Lab. Transfer: CSU General Education: (MIC-GE: D2)

CMPSC 294 — COMPUTER SCIENCE FINAL PROJECT 3 UNITS  
Limitations on Enrollment: The students are required to bring the skills of their individual 
specializations, based on their 18 hours of coursework in either Information Systems, Networking, 
or Programming to form teams and solve a collaborative real-world IT industry level of 
problem application.  
Culminating experience for students pursuing an Associate of Science 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 or P/NP) Lecture/Lab. 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, micro-
computer applications, and related technologies. Topic to be announced in class schedule. Twelve 
maximum units in any combination. Fields 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 micro-
computer. 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.
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)

DAIND 303—INDUSTRIAL SAFETY 1 UNIT
Introduction to the elements of industrial safety as it relates to a dairy processing facility. Topics to be covered: illness and injury prevention, confined space entry, lock-out, tag-out programs, hazard communication programs, and industrial lift programs. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 304—SENSORY EVALUATION 1 UNIT
Develop skills for sight, taste, smell and touch, in the evaluation of various dairy products. Course content follows the California Agriculture Teaching Association Curricular Code used for Career Development Events—dairy product evaluation. Applicable to the associate degree. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 305—HACCP AND FOOD SAFETY 1 UNIT
Introduction to hazardous analysis critical control point programs including the importance of HACCP and the identification of critical control points. The class will demonstrate how to design and implement an HACCP program. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 306—DAIRY INDUSTRY EMPLOYABILITY SKILLS 1 UNIT
Resume preparation, interviewing skills, and job search techniques that are unique to the dairy processing industry. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 307—PROCESS EQUIPMENT AND ENGINEERING 1 UNIT
Introduction and identification of equipment used in the processing facility. Cleaning, sanitizing and maintenance of processing equipment. Performance of equipment breakdowns for inspection. Discussion of required regulatory licensing. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 308—LABORATORY SKILLS 1 UNIT
Demonstration and analysis of common laboratory tests. Identification of various equipment used in the dairy lab, proper safety, and chemical disposal. Designed for the plant technician, not a laboratory technician. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 309—DAIRY PRODUCTS AND MARKETING 1 UNIT
Introduction to the standards of identifying milk, dairy foods and elementary dairy products. Marketing and handling will be covered. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 310—TRANSPORTATION OF DAIRY PRODUCTS 1 UNIT
Introduction to aspects of raw milk pick-up, routing, transportation to the milk plant, loading and transporting of finished/packaged dairy products. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 311—CHEESE AND WHEY PROCESSING 1 UNIT
Introduction to aspects in the art of cheese-making. Elementary techniques of whey processing. Field trips required. Two maximum completions. Lecture. (A-F Only)

DAIND 312—WAREHOUSING/DRY AND REFRIGERATED 1 UNIT
DTAST 360 — INTRODUCTION TO DENTAL ASSISTING 3 UNITS
Prerequisite: High school graduation or equivalent; proof of completion of CPR for the Professional Rescuer from the American Red Cross or the Health Care Provider CPR course from the American Heart Association, which must be valid through the end of the program.
An introduction to the profession of dentistry including the educational requirements, legal and ethical responsibilities of each member of the dental team. Discussion of current issues facing the dental profession. Overview of the career opportunities available to the registered dental assistant. Introduction to data gathering on dental patients, including oral diagnosis and treatment planning. Instruction in evaluating the medically compromised dental patient and preparing for medical emergencies. Field trips may be required. Lecture. Materials fee required. (A-F Only)(Fall).

DTAST 361 — PREVENTION OF DISEASE TRANSMISSION 2 UNITS
Prerequisite: High school graduation or equivalent; proof of completion of CPR for the Professional Rescuer from the American Red Cross or the Health Care Provider CPR course from the American Heart Association, which must be valid through the end of the program.
This course covers the knowledge and skills required for dental health care professionals to control, prevent the spread of disease, properly manage hazardous chemicals and maintain a safe dental office environment. Protocols established by the American Dental Association, Dental Board of California, California Dental Association, Center for Disease Control and Prevention, OSHA, and OSHA regulations with emphasis on Bloodborne Pathogen Standard and the Hazard Communication Standard. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Fall).

DTAST 362 — DENTAL SCIENCE 3 UNITS
Concurrent Enrollment: DTAST 360, 361, 362, 363, 364 and 365
An overview of human anatomy and physiology with an emphasis on the head and neck. The knowledge of the structures of the head and oral cavity including identification of oral landmarks and to recognize whether any abnormalities or lesions exist. The study of tooth morphology and the relationship to form and function of the dentition. Recognize conditions that are variations of normal but not considered pathological. Field trips may be required. Lecture. Materials fee required. (A-F Only)(Fall).

DTAST 363 — INTRODUCTION TO CLINICAL DENTISTRY 2 UNITS
Concurrent Enrollment: DTAST 360, 361, 362, 364 and 365
Introduction to dental assisting, role of the chairside assistant, basic skills for preparing the dental patient for treatment. Intraoral tasks delegated to qualified dental assistants which are related to operative dentistry. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Fall).

DTAST 364 — DENTAL MATERIALS 2 UNITS
Concurrent Enrollment: DTAST 360, 361, 362, 363 and 365
The dental assistant’s role in the manipulation of dental materials used in the oral environment. Instruction in the properties, characteristics, and manipulation of dental materials. Identification of government regulations and compliance with health and safety procedures when using dental materials. The study of drugs, their composition, uses, effects and contraindications as applied to the dental patient. Identification of laws regulating safe use of medication for the dental patient. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)

DTAST 365 — THEORY OF DENTAL RADIOLOGY 3 UNITS
Prerequisite: High school graduation or equivalent; proof of completion of CPR for the Professional Rescuer from the American Red Cross or the Health Care Provider CPR course from the American Heart Association, which must be valid through the end of the program.
Introduction to the principles of dental radiology, basic concepts of x-ray generation, occupational safety procedures, materials and equipment used in producing dental x-rays. Theory of dental radiological techniques. DTAST 365 (Fall) and DTAST 369 (Spring) have been designed to meet the standards set forth by the Dental Board of California for the California Radiation Safety Licensure. Both courses must be completed with a grade of C or better in order to qualify for licensure. Field trips may be required. Lecture. Materials fee required. (A-F Only)(Fall).

DTAST 366 — ADMINISTRATIVE DENTAL ASSISTING 2 UNITS
Prerequisite: Satisfactory completion of DTAST 360, 361, 362, 363, 364 and 365
Concurrent Enrollment: DTAST 367, 368, 369 and 370
Basic dental office business concepts and procedures including communication skills, patient relations, record management, risk management and application of current technology. Employment skills necessary to obtain a position as an administrative dental assistant. Field trips may be required. Lecture. Materials fee required. (A-F Only)(Fall).

DTAST 367 — EXPANDED FUNCTIONS 2 UNITS
Prerequisite: Satisfactory completion of DTAST 360, 361, 362, 363, 364 and 365 with a C or better.
Concurrent Enrollment: DTAST 366, 368, 369 and 370.
Achievement of a healthy and functional dentition through the prevention of new and recurring diseases by means of dental plaque control techniques. Procedures in which plaque and stains on the surface of the teeth are removed from the coronal surfaces. Specific intraoral tasks that are completed as a procedure delegated to the expanded function dental assistant. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Spring)

DTAST 368 — ADVANCED DENTAL ASSISTING 3 UNITS
Prerequisite: Satisfactory completion of DTAST 360, 361, 362, 363, 364 and 365 with a C or better.
Concurrent Enrollment: DTAST 366, 367, 369 and 370.
Advanced training in the areas of dental specialties including prosthodontics, endodontics, periodontics, pediatric dentistry, orthodontics and oral surgery. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Spring)

DTAST 369 — CLINICAL DENTAL RADIOLOGY 3 UNITS
Prerequisite: Satisfactory completion of DTAST 360, 361, 362, 363, 364 and 365 with a C or better.
Concurrent Enrollment: DTAST 366, 367, 368 and 370.
Applied advanced dental radiography techniques. Identification and interpretation of anatomical landmarks related to dental radiography, exposure, processing and evaluation techniques, and applied quality assurance techniques. Emphasis on infection control as applied to dental radiography, evaluation of the exposed and processed dental radiograph used for diagnostic interpretation using manual and automatic processing. DTAST 365 (Fall) and DTAST 369 (Spring) have been designed to meet the standards set forth by the Dental Board of California for the California Radiation Safety Licensure. Both courses must be completed with a grade of C or better in order to qualify for licensure. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Spring)

DTAST 370 — CLINICAL 1 6 UNITS
Prerequisite: Satisfactory completion of DTAST 360, 361, 362, 363, 364 and 365 with a C or better.
Concurrent Enrollment: DTAST 366, 367, 368, and 369.
Role of the chairside dental assistant; basic skills for preparing the dental patient for treatment including knowledge and skills essential to the functions of the registered dental assistant during clinical experience. Field trips may be required. Lecture/Laboratory. Materials fee required. (A-F Only)(Spring)

DTAST 371 — CLINICAL 2 1 UNIT
Prerequisite: Satisfactory completion of DTAST 366, 367, 368, 369 and 370 with a C or better.
Role of the chairside dental assistant; advanced skills for preparing the dental patient for treatment including knowledge and skills essential to the functions of the registered dental assistant. Field trips may be required. Laboratory. Materials fee required. (A-F Only)(Summer)

DTAST 372 — PIT AND FISSURE SEALANTS 1/2 UNIT
Prerequisite: Satisfactory completion of DTAST 367.
Limitations on Enrollment: Dental assistant classes are limited to those admitted to the Dental Assistant program.
Tooth morphology and caries etiology will be reviewed to enhance the presentation of principles and application of pit and fissure sealants. This course meets the requirements for certification in Pit and Sealant Placement for California Dental Board. Materials Fee Required. (P/NP Only) Lab.
EASCI (Earth Science)

Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/easci/
Instructors: Noah Hughes

EASCI 161—EARTH SCIENCE 4 UNITS
An introductory study of the several branches of earth science: geology, oceanography, meteorology, and astronomy. Covers topics including natural resources, minerals, rocks, volcanism, plate tectonics, earthquakes, weathering, erosion, geological time, fresh water, ocean water, ocean currents, the ocean floor, atmosphere, clouds, storms, the sun, the moon, and the solar system. Field trips are required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) General Education: (MJC-GE:A)(CSU-GE:B1, B3)(IGETC: 5A)

EASCI 162—INTRODUCTION TO OCEANOGRAPHY 4 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 70 or satisfactorily complete PHYS 160 and satisfactorily complete EASCI 161.
Introduction to the ocean’s role in the earth system, ocean basins and plate tectonics, properties of ocean water, marine sediments, ocean-atmosphere interaction, ocean currents, ocean waves and tides, coastal processes, marine ecosystems, ocean life, ocean and climate, oceanic effects of climate change, oceanographic techniques, ocean stewardship, and the ocean problems. Lab activities emphasize gathering and analysis of oceanographic data (both archived and real-time) to understand and predict oceanographic phenomena. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)(CC ESC 50) General Education: (MJC-GE:A)(CSU-GE:B1, B3)(IGETC: 5A)

ECON (Economics)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: www.mjc.edu/prospective/programs/bbss/
Instructors: Rose Lamont

ECON 101—PRINCIPLES OF MACROECONOMICS 3 UNITS
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process. 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)(TCSU ECON 110) General Education: (MJC-GE:B)(CSU-GE:D2)(IGETC: 4B)

ECON 102—PRINCIPLES OF MICROECONOMICS 3 UNITS
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to have college-level composition skills.
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 110)(TCSU ECON 120) General Education: (MJC-GE:B)(CSU-GE:D2)(IGETC: 4B)

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, D6)(IGETC: 4B, 4F)

EHS (Environmental Horticultural Science)

Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: David Baggett, Gail Brumley, Dale Pollard

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. Lecture.

EHS 51—ENVIRONMENTAL HORTICULATURE PREPARATION 3 UNITS
Formerly listed as OH 51
A preparatory course in environmental horticulture, emphasis on nursery operation including structures and layout, seeding, transplanting, planting, bailing, canning, fertilizing, 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.

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. Materials fee required.

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 place of horticultural crops in the economy and the role of plants in the environment. Discussion will center on the physiology of plants and their use and care. Emphasis will be 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 Nurseriesmen & 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 Nurseriesmen & 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 SCIENCE 3 UNITS
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. Saturday labs required. Field trips required. (A-F Only) Lecture/Lab. 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: Before enrolling in this course, students are strongly advised to have successfully completed EHS 201 and EHS 202. The study and implementation of the art and science of landscape design, including principles of design, the design process, drafting, graphics, and presentation methods. Project emphasis is placed upon residential and small commercial sites. Field trips are required. (A-F Only) Lecture/Lab. 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 are required. (A-F or P/NP) Lecture/Lab. 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

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
Introduction into the concepts and practices of floral design. In-depth study of the principles and elements of design used in floral composition. Principles of design as well as the design process and implement this process through the medium of floral materials. Hands-on laboratory experiences and practice in the art of floral design. American Geometric Line design is primary focus. Materials fee required. Field trips are required. (A-F Only) Lecture/Lab. 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 Only) Materials fee required. Transfer: CSU

EHS 291 — ENVIRONMENTAL HORTICULTURE SCIENCE TEACHING STRATEGIES 3 UNITS
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
ELTEC 205—ELECTRONICS FABRICATION AND ASSEMBLY TECHNIQUES  
Introduction to fabrication and assembly techniques used in the electronics industry. Soldering, circuit board repair, and component identification, manual and automated techniques used in circuit assembly and product manufacture are included. Materials Fee Required. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

ELTEC 208—THE WORLD OF ELECTRICITY AND ELECTRONICS  
Also offered as INTEC 208
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 20.
An overview of electrical and electronic phenomena as applied to common consumer and industrial devices. The course examines the physical nature and laws of electricity and magnetism and the application of the scientific method. DC and AC circuits and their characteristics are examined, predicted, and measured. Electronic test equipment and voltage sources are utilized in the construction, troubleshooting and testing of electrical and electronic circuits. The historical development and the socioeconomic aspects of the "electronic age" are also examined. **This course is approved by the State of California for the Department of Apprenticeship Standards (DAS) Electricians Training Program. Materials fee required. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU General Education: (MJC-GE: A)

ELTEC 212—DIGITAL PRINCIPLES AND CIRCUITS  
Also offered as CMPET 212
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 70 with a minimum grade of C or better or concurrent enrollment.
Introduction to digital circuits. Use and application of digital components in electronic devices and controls. Study of number systems, binary logic gates, counters, shift registers, ALU and D/A interfaces, and memories. Special emphasis on interfacing digital circuits to real-world input and output devices. Introduction to programmable logic devices. Prepares students for the electronic design and implementation. This course is approved by the State of California for the DAS Electricians Apprentice program. Materials Fee Required. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

ELTEC 234—ADVANCED TOPICS IN PROGRAMMABLE LOGIC CONTROLLERS  
Recommended for Success: Satisfactory completion of ELTEC 232 or CMPET 232
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
Fast and efficient troubleshooting methods are presented and practiced. Covers single-solution problems commonly found in industrial equipment and processes, business, medicine, and everyday life. Prepares students to actively troubleshoot problems in personal and professional life. Multiple-solution problem-solving, brainstorming, and "out of the box" thinking methods also presented and practiced. This course is approved by the State of California for the DAS Electricians Training program. Field trips are not required. (A-F or P/NP) Lecture. Transfer: CSU

ELTEC 320—ELECTRICAL SAFETY 1 UNIT
Also offered as INTEC 230
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 Only) Lecture.

ELTEC 321—PHOTOVOLTAIC SYSTEMS 3 UNITS
Prerequisite: Satisfactory completion of ELTEC 208 or INTEC 208 or and ELTEC 230 or INTEC 230 and ELTEC 320 or INTEC 320 and ELTEC 229 or INTEC 229 or and AGM 225 or INTEC 225 and INTEC 24B.
Study of Off-Grid, Interconnected (Grid-tied), and Hybrid photovoltaic systems, including the study of locations and positioning for PV arrays, electrical and mechanical design and integration (including hands-on experiences), Safety rules and regulations related to this industry, financial topics (systems estimates and rebates), and an overview of NABCEP certification requirements. Field trips may be required. (A-F Only) Lecture/Lab.

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 103: Completion of ENGL 101 with a grade of C or better.

EMSL (Emergency Medical Service)

EMS 350—FIRST RESPONDER WITH HEALTHCARE PROVIDER CPR 3 UNITS
An entry-level course designed for firefighters and other emergency workers who will respond to medical emergencies ahead of 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. Materials fee required. Student may repeat if required by regulation. Field trips are not required. (A-F Only) Lecture.

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. Lecture. (A-F or P/NP)

EMS 389—EMERGENCY MEDICAL TECHNICIAN 1- LAB ½ UNIT
Prerequisite: Satisfactory completion of EMS 350.
Corequisite: Concurrent enrollment required in EMS 390.
This is the laboratory course for EMS 390 which places the student in a practical environment. Students will observe and perform patient diagnostics and treatment under the direct supervision of a preceptor. Student may repeat if required by regulation. Field trips are not required. (A-F Only) Lab.

EMS 390—EMERGENCY MEDICAL TECHNICIAN 1 6 UNITS
Limitations on Enrollment: Enrollment limited to students who can demonstrate completion of basic First Aid and CPR (Healthcare Provider level) from the American Heart Association or National Safety Council, or Professional Rescuer level from the American Red Cross. Students must also provide certification of completion of a 40-hour First Responder course which meets State of California Fire Marshal training level.
Prepares the student for certification as an Emergency Medical Technician I. Students are trained to provide basic life support emergency care as mandated by the California Emergency Medical Services authority. Materials fee required. Field trips are not required. (A-F Only) Lecture.

EMS 391—EMERGENCY MEDICAL TECHNICIAN 1 REFRESHER COURSE 1½ UNITS
Prerequisite: Satisfactory completion of EMS 390 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)

Dean: Patrick Bettencourt
Division Office: Journalism 180
Phone: (209) 575-6149
Division website: www.mjc.edu/current/programs/ENGL

Instructors: Adrienne Peek, Ann Smith, Annaliese Hausler-Akpozi, Barbara Jensen, Bruce Anders; Deborah Gilbert, PhD, Denise Smith, Dimitri Kerotis, Emily Malam; Ingrid Kerotis, James Beggs, PhD, Jason Woinhmath, PhD, Jeffrey Netto, Jennifer Hamilton, PhD, Jenny Netto, Jillian Daly, Lillian Vallee, PhD, Michael Smeidshammer, PhD; Michelle Christopher-son, Nita Gopal, Optimism One; RoseLee Hurst, Sam Pierstorff, Shelly Circle, Theresa Stovall, Theron Westrope, PhD, Timothy Hobert

ENGL 48—GRAMMAR REVIEW 1 UNIT
Students will review the fundamentals of standard English grammar. They will practice recognizing and correcting errors in grammar and usage. Field trips are not required. (A-F or P/NP) Lecture.

ENGL 49—BASIC ENGLISH SKILLS 5 UNITS
Corequisite: or satisfactory completion of Concurrent enrollment in or satisfactory completion of READ 40.
Fundamentals of writing. Emphasis on improving writing fluency, developing paragraphs and short essays, and learning to edit for spelling, punctuation and word usage. Credit in this course may not be used to satisfy English requirements for graduation from Modesto Junior College. Field trips may be required. (P/NP Only) Lecture. Transfer: (CC ENGL 650)

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. Lecture (A-F or P/NP) Transfer: (CC ENGL 151)

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) Transfer: (CSU, UC)(CC ENGL 1A) General Education: (MJC-GE: D1)(CSU-GE: A2)(IGETC: 1A)
ENGL 102 — ADVANCED COMPOSITION & INTRODUCTION TO LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 101.
Advanced composition with an introduction to literary analysis of fiction, poetry, and drama. Intended primarily for university transfer students, but open to any qualified student. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ENGL 18) General Education: (MJC-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: (MJC-GE: D2)(CSU-GE: A3)(IGETC: 1B)

ENGL 105 — CREATIVE WRITING: POETRY 3 UNITS
Prerequisite: Satisfactory completion of ENGL 101 with a minimum grade of C or better.
Instruction and practice in writing poetry. Two maximum completions. Field trips are not required. (A-F or P/NP) 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 with a minimum grade of C or better.
Instruction and practice in writing shorter forms of fiction. A maximum of 6 units of creative writing transferrable to University of California. Two maximum completions. Field trips are not required. (A-F or P/NP) Lecture. MJC Activities. Transfer: (CSU, UC) General Education: (CSU-GE: C2)

ENGL 108 — CREATIVE WRITING: AUTOBIOGRAPHY 3 UNITS
Prerequisite: Satisfactory completion of ENGL 101 with a minimum grade of C or better.
Instruction and practice in the writing of an autobiography. Two maximum completions. Field trips are not required. (A-F or P/NP) Lecture. MJC Activities. Transfer: (CSU, UC)

ENGL 109 — CREATIVE WRITING; SCRIPTWRITING 3 UNITS
Prerequisite: Satisfactory completion of ENGL 101.
Instruction and practice in the writing of dramatic scripts for film, television, and theater. Two maximum completions. Field trips may be required. (A-F or P/NP) Lecture. MJC Activities. Transfer: (CSU, UC)

ENGL 112 — INTRODUCTION TO THE NOVEL AND SHORT STORY 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50. Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
An 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

ENGL 114 — INTRODUCTION TO POETRY 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50 or qualification by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Analysis and discussion of poetry. 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 116 — INTRODUCTION TO DRAMA 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50 or qualification by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Analysis and discussion of selected plays from classical Greek period to present. 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 131 — INTRODUCTION TO WORLD LITERATURE TO 1500 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to have successfully completed ENGL 101 and ENGL 102.
Classical and medieval literature including historical backgrounds and reading in Asian, Middle Eastern, and European cultures. 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 132 — INTRODUCTION TO WORLD LITERATURE (1500 TO PRESENT) 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to have successfully completed ENGL 101 and ENGL 102.
ENGL 132 is a continuation of ENGL 131, reading from the renaissance to contemporary literatures of Asian, Middle Eastern, European, and Latin American cultures. Note: students do not have to have taken ENGL 131 to enroll in ENGL 132. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ENGL 18) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

ENGL 135 — SURVEY OF AMERICAN LITERATURE TO 1850 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102.

ENGL 136 — SURVEY OF AMERICAN LITERATURE: 1850 TO THE PRESENT 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102.

ENGL 137 — SURVEY OF ENGLISH LITERATURE TO THE 18TH CENTURY 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102.
Survey of English literary history from the Anglo-Saxons to the Eighteenth Century with detailed study of the writings of Chaucer, Marlowe, Spenser, Shakespeare, Milton, and others. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ENGL 47) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

ENGL 138 — SURVEY OF ENGLISH LITERATURE: 1700 - PRESENT 3 UNITS
Formerly listed as ENGL 138 - Survey of English Lit: 18th Century to Present
Prerequisite: Satisfactory completion of ENGL 50 or qualification by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and ENGL 102.
Literary history of the eighteenth and nineteenth centuries with detailed study of the writings of Pope, Wordsworth, Coleridge, Byron, Keats, Shelley, Tennyson, and others. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC ENGL 47) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

ENGL 151 — FOLKLORE 3 UNITS
Formerly listed as ENGL 151 - Introduction to Folklore
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Examine interrelationships of people throughout the world through discussion and analysis of our folk heritage. Folk-themes and symbolism in literature also will be discussed. 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 156 — THE BIBLE AS LITERATURE: THE HEBREW CANON AND INTERTESTAMENTALWRITINGS 3 UNITS
Formerly listed as ENGL 156 - The Bible As Literature: The Hebrew Canon
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to have 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. 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 157 — THE BIBLE AS LITERATURE: THE NEW TESTAMENT 3 UNITS
Formerly listed as ENGL 157 - Bible As Lit: The New Testament
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Literary criticism and an appreciation of historical background and textual transmission of selected books of the New Testament. 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 161 — FILM APPRECIATION 4 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to achieve satisfactory completion of ENGL 101.
An introductory course in film appreciation, emphasizing the development of sensitivity and critical judgment in audience response to film. Field trips may be required. (A-F or P/NP) Lecture. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C1, C2)(IGETC: 3B)

ENGL 162 — HISTORY OF CINEMA 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
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 are not required. (A-F or P/NP) Lecture/Lab. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C2)(IGETC: 3B)

ENGL 163 — INTRODUCTION TO SHAKESPEARE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete English 101 and 102.
A reading of six to nine representative comedies, histories, and tragedies, designed to introduce the student to Shakespeare's art. 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 168 — ADOLESCENT LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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, and ways to promote interest, themes, and criteria for choosing materials. 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 169 — CHILDREN’S LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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. 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 171 — INTRODUCTION TO AFRICAN-AMERICAN LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
An introduction to the contributions of African-Americans in American literature from the slave era to the present. The emphasis will be on a chronological study of major works in the following genres: slave narratives, folk tales, poetry, short story, novel, and drama. 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 172 — INTRO TO CHICANO/A LITERATURE 3 UNITS
Formerly listed as ENGL 172 - Intro to Chicano Literature
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 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. (A-F or P/NP) Lecture. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C2)(IGETC: 3B)

ENGL 173 — INTRO TO LATIN AMERICAN LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50 or satisfaction by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
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. Lecture. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C2)(IGETC: 3B)

ENGL 174 — INTRODUCTION TO MODERN ASIAN LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50 or satisfaction by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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. Field trips are not required. (A-F Only) Lecture. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C2)(IGETC: 3B)

ENGL 175 — INTRODUCTION TO WOMEN’S LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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. Field trips may be required. (A-F Only) Lecture. Transfer: [CSU, UC] General Education: [MJC-GE: C](CSU-GE: C2)(IGETC: 3B)

ENGL 176 — INTRODUCTION TO MEXICAN LITERATURE 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Introduction to Mexican literature from its Colonial Period to the present. Emphasis on chronologi- cal survey of major works of Mexican writers studied in English translation and selected from the following: chronicles, epistles, poetry, novels, drama, and short stories. 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 179 — INTRODUCTION TO NATIVE AMERICAN LITERATURE, 3 UNITS
MYTHOLOGY, AND THE ORAL TRADITION
Formerly listed as ENGL 179 - Intro to Native American Lit
Prerequisite: Satisfactory completion of ENGL 50 or satisfaction by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
Study of traditional and contemporary Native American literature, oral traditions, and myths from a variety of nations, including some local Native American peoples. 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 non-fiction, and poetry. Field trips may be required. (A-F Only) 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 processes of English composition. Students will learn strategies for tutoring developmental to advanced writers. Specific focus will be on techniques for improve-ment of fluency, structure, revision, proofreading, and reading. Intended for students selected as tutors for the Division of Literature and Language Arts’ learning centers. Field trips may be required. (A-F Only) Lecture. Transfer: [CSU]
ENGR (Engineering)

ENGR 100—INTRODUCTION TO ENGINEERING & ARCHITECTURE  1 UNIT
Also offered as ARCH 100
Introduction to the vocational and academic opportunities in engineering, architecture and related technologies. Topics include models of student success, characteristics of the professions, degree requirements, importance of teamwork and self assessment. Activities include field trips, practice labs, projects and presentations by practicing engineers and architects. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)

ENGR 101—INTRODUCTION TO SURVEYING AND TOPOGRAPHY  3 UNITS
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 127—ENGINEERING GRAPHICS  4 UNITS
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. Transfer: (CSU, UC)

ENGR 130—PROPERTIES OF MATERIALS  4 UNITS
Prerequisite: Satisfactory completion of CHEM 101 with a minimum grade of C or better/PHYS 101 with a minimum grade of C or better and MATH 171.
Investigation of the internal structure of metals, ceramics, polymers, composites, and semiconductor materials and their effect on mechanical, electrical, magnetic, and thermal properties. Laboratory investigations include metallography, tensile/compression tests, and heat treatment analysis, hardness testing and composite performance testing. Materials Fee Required Field trips are required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

ENGR 135—ENGINEERING MECHANICS/STATICS  3 UNITS
Prerequisite: Satisfactory completion of PHYS 101 and MATH 172.
Static analysis of particles and rigid bodies; vector notation; analytical solutions of two- and three-dimensional structures in equilibrium; centroids, center of gravity, moments of inertia and friction. Lecture/Laboratory. (A-F or P/NP) Transfer: (CSU, UC)

ENGR 140—INTRODUCTION TO CIRCUIT ANALYSIS (WITHOUT LAB)  3 UNITS
Satisfactory prior completion of or concurrent enrollment in MATH 174 and PHYS 103.
Direct-current and alternating-current circuit analysis; steady and transient phenomena in RLC circuits; circuit theorems; single-phase and polyphase alternating-current circuits. Field trips may be required. Lecture/Laboratory. (A-F or P/NP) Transfer: (CSU, UC)

ENGR 141—INTRODUCTION TO CIRCUIT ANALYSIS (WITH LAB)  4 UNITS
Prerequisite: Concurrent enrollment in or prior satisfactory completion of MATH 174 and PHYS 102.
Direct-current and alternating-current circuit analysis; steady and transient phenomena in RLC circuits; circuit theorems; single-phase and polyphase alternating-current circuits and laboratory demonstrations/exercises emphasizing circuit construction, analysis and instrumentation. Field trips may be required. Lecture/Laboratory. Materials fee may be required. (Spring) (A-F or P/NP) Transfer: (CSU, UC)

ENGTCH (Engineering Technology)

ENGTCH 210—INTRO TO COMPUTER ASSISTED DRAFTING  1 UNIT
Introduction to the use of the computer as a drafting tool. Topics include basic drawing, editing, and utility commands of AutoCAD. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU (MJC ENGTCH 210+ 211=CC DRAF 50A)

ENGTCH 211—INTERMEDIATE COMPUTER ASSISTED DRAFTING  1 UNIT
Formerly listed as Intermediate Topics in Computer Assisted Drafting
Prerequisite: Satisfactory completion of ENGTCH 210.
Continuation of ENGTCH 210 to include topics on the use of layers, blocks, templates, dimensioning and various advanced drawing and editing commands. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU (MJC ENGTCH 210+ 211=CC DRAF 50A)

ENGTCH 212—ADVANCED COMPUTER ASSISTED DRAFTING  1 UNIT
Formerly listed as Advanced Topics in Computer Assisted Drafting
Prerequisite: Satisfactory completion of ENGTCH 211.
Advanced topics in computer assisted drafting including blocks and attributes, external references, layouts, viewpoints and other tools necessary for working drawings. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

ENGTCH 215—INTRODUCTION TO SOLID MODELING  1 UNIT
Introduction to the use of the solid modeling software. Topics include working in the sketch environment, solids construction, solids editing, drawing views, dimensioning, and assemblies. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: CSU
ENSCI (Environmental Sciences)

Dean: Mark Anglin
Division Office: Agriculture Building, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html

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 may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B2)(IGETC: SB)

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) General Education: (MJC-GE: B) (CSU-GE: D7) (IGETC: 4G)

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. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

ESL (English as a Second Language)

Dean: Patrick Bettencourt
Division Office: Journalism 180, Phone: (209) 575-6149,
Division website: www.mjc.edu/current/programs/divdeps/litlang/
Instructors: Daniel Martin, Gabriele Steiner, Michael Strangio, Ruth Luman, Sara Shore, Michael Akard

The Literature and Language Arts division offers two programs in ESL: a non-credit, adult basic education program of courses on six 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 PATHWAYS

To earn an associate degree and/or transfer to a four-year university:

- COLLEGE-LEVEL ENGLISH
  - ENGL 101
  - ENGL 50
  - ENGL 49

To move from the Life and Work noncredit sequence to the Life and Work 1-6 credit sequence, students will be required to submit a Prerequisite Challenge Form at the Literature & Language Arts division office.

At any point in the "Life and Work" sequence, students may complete the Accuplacer assessment to determine placement level in the "College" sequence.

COURSES OFFERED
ESL: NON-DEGREE COURSES FOR CREDIT

ESL 1—ESL: BEGINNING ENGLISH FOR LIFE AND WORK  5 UNITS
Beginning English for non-English speakers. Emphasis on beginning spoken English and basic literacy. Field trips may be required. (A-F Only) Lecture.

ESL 2—ESL: ELEMENTARY ENGLISH FOR LIFE AND WORK  5 UNITS
Prerequisite: Satisfactory completion of ESL 1 or qualification by the MJC assessment process. Elementary English with emphasis on spoken English for practical needs and preparation for advancement into academic ESL classes. Field trips may be required. (A-F Only) Lecture.

ESL 3—ESL: HIGHER ELEMENTARY ENGLISH FOR LIFE AND WORK  5 UNITS
Prerequisite: Satisfactory completion of ESL 2 or qualification by the MJC assessment process. High elementary level English for speakers of other languages. Instruction and practice in listening, speaking, and reading. Preparation for advancement into credit ESL classes. Field trips may be required. (A-F Only) Lecture.

ESL 4—ESL: INTERMEDIATE ENGLISH FOR LIFE AND WORK  5 UNITS
Prerequisite: Satisfactory completion of ESL 3 or qualification by the MJC assessment process. 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. (A-F Only) Lecture.

ESL 5—ESL: HIGH INTERMEDIATE ENGLISH FOR LIFE AND WORK  5 UNITS
Prerequisite: Satisfactory completion of ESL 4 or qualification by the MJC assessment process. Intermediate level English for speakers of other languages. Instruction and practice in listening, speaking, reading, and writing with a greater emphasis on academic and workplace preparation. Field trips may be required. (A-F Only) Lecture.

ESL 6—ESL: LOW ADVANCED ENGLISH FOR LIFE AND WORK  5 UNITS
Prerequisite: Satisfactory completion of ESL 5 or qualification by the MJC assessment process. Low advanced level English for speakers of other languages. Instruction and practice in listening, speaking, reading, and writing with a greater emphasis on transition to academic programs, the workplace, and job-training courses. Field trips may be required. (A-F Only) Lecture.

ESL 10—ENGLISH LANGUAGE 1  10 UNITS
Recommended for Success: 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
Prerequisite: Satisfactory completion of ESL 10 or qualification by the MJC assessment process. Continuation of ESL 10. Elementary English grammar component 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. (A-F or P/NP) Lecture.

ESL 23—ENGLISH SPEAKING AND LISTENING  5 UNITS
Formerly listed as ESL 23 - Spoken English 1
Recommeded for Success: Before enrolling in this course, students are strongly advised to Use English grammar and tenses at the elementary level. Read simplified texts demonstrating knowledge of elementary vocabulary and follow basic oral and written instructions without the need of a translator. An introduction to basic pronunciation of vowels and consonants of the English language. Attention paid to rhythm, intonation, and syllable stress, and the aural and vocabulary skills required to function in basic English. Field trips may be required. (A-F or P/NP) Lecture.

ESL 24—ENGLISH COMPOSITION AND READING  5 UNITS
Prerequisite: Satisfactory completion of ESL 20 or qualification by the MJC assessment process. Recommended for Success: Before enrolling in this course, students are strongly advised to be concurrently enrolled in ESL 20. Practice in reading and writing for students at the beginning (second-semester) level. Significant homework may be assigned to a lab. Field trips may be required. (A-F or P/NP) Lecture.

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. 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. Field trips may be required. (A-F or P/NP).

ESL 33—ENGLISH SPEAKING AND LISTENING  5 UNITS
Prerequisite: Satisfactory completion of ESL 23 or qualification by the MJC assessment process. Continued development in pronunciation, rhythm, intonation, stress, reductions, linking, and focus shift of English. Beginning aural comprehension of simplified lectures, participation in group discussion, and vocabulary necessary for delivery of short presentations. Field trips are not required. (A-F or P/NP) Lecture.

ESL 34—ENGLISH COMPOSITION AND READING  5 UNITS
Prerequisite: Satisfactory completion of ESL 20 or qualification by the MJC assessment process and ESL 24 or qualification by the MJC assessment process. Recommended for Success: Before enrolling in this course, students are strongly advised to be concurrently enrolled in ESL 30. Practice in reading and writing for students at the low-intermediate (third-semester) level of ESL courses. Continuation of ESL 24. Significant homework may be assigned to a lab. Field trips may be required. (A-F or P/NP) Lecture.

ESL 40—ENGLISH LANGUAGE 4  5 UNITS
Non-degree course.
Prerequisite: Placement in ESL 40 through assessment process or satisfactory completion of ESL 30 or equivalent course. Intermediate course in English for persons learning English as another language. Introduction to more difficult structures in English sentences. Review of elementary English. Field trips may be required. (A-F or P/NP) Lecture.

ESL 40A—SKILLS FOR SUCCESS IN INTERMEDIATE GRAMMAR  ½ UNIT
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 Field trips are not required. (A-F or P/NP) Lab.

ESL 43—ENGLISH SPEAKING AND LISTENING  3½ UNITS
Formerly listed as: ESL - 43 - Spoken English 2
Prerequisite: Satisfactory completion of ESL 33 or qualification by the MJC assessment process. Continued development in natural pronunciation of American English with emphasis on advanced rhythm, intonation, and stress. Students become adept at oral presentations and gain proficiency in leading discussions. Aural comprehension emphasizes paraphrasing, note taking, and summaries of college lectures. Field trips may be required. (A-F or P/NP) Lecture.

ESL 44—ENGLISH COMPOSITION AND READING  5 UNITS
Prerequisite: Satisfactory completion of ESL 30 and ESL 34 or qualification by the MJC assessment process.
Recommended for Success: Before enrolling in this course, students are strongly advised to be concurrently enrolled in ESL 40. Practice in writing paragraphs and 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. Continuation of ESL 34. Significant homework may be assigned to a lab. Field trips may be required. (A-F or P/NP) Lecture.

ESL 45—ENGLISH LANGUAGE 5  5 UNITS
Prerequisite: Placement in ESL 45 through assessment process or satisfactory completion of ESL 40 or equivalent 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—ENGLISH COMPOSITION AND READING  5 UNITS
Prerequisite: Satisfactory completion of with a minimum grade of C or better Placement in ESL 45 through assessment process or satisfactory completion of ESL 40 and ESL 44 or equivalent 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. Field trips may be required. (A-F or P/NP) Lecture.
ESL 47—ENGLISH LANGUAGE 6  
Prerequisite: Placement in ESL 47 through assessment process or satisfactory completion of ESL 45 or equivalent 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  
Prerequisite: Satisfactory completion of ESL 45 and ESL 46 or qualification by the MJC assessment process. Recommended for Success: Before enrolling in this course, students are strongly advised to be concurrently enrolled in ESL 47. 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. Field trips may be required. (A-F or P/NP) Lecture.

ESL: NON-CREDIT, NON-DEGREE COURSES

ESL 901—ESL: BEGINNING ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 901 - ESL: Beginning  
Beginning English for non-English speakers. Emphasis on beginning spoken English and basic literacy. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 902—ESL: ELEMENTARY ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 902 - ESL: Lower Elementary  
Prerequisite: Satisfactory completion of ESL 901 or qualification by the MJC assessment process. Elementary English with emphasis on spoken English for practical needs and preparation for transition into academic ESL classes. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 903—ESL: HIGHER ELEMENTARY ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 903 - ESL: Higher Elementary  
Prerequisite: Satisfactory completion of ESL 902 or qualification by the MJC assessment process. High elementary level English for speakers of other languages. Instruction and practice in listening, speaking, and reading and writing. Preparation for transition into academic ESL classes. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 904—ESL: INTERMEDIATE ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 904 - ESL: Intermediate  
Prerequisite: Satisfactory completion of ESL 903 or qualification by the MJC assessment process. Intermediate level English for speakers of other languages. Instruction and practice in listening, speaking, reading, and writing with a greater emphasis on academic preparation. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 905—ESL: HIGH INTERMEDIATE ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 920 - English At Work 1  
Prerequisite: Satisfactory completion of ESL 904 or qualification by the MJC assessment process. High intermediate level English for speakers of other languages. Instruction and practice in listening, speaking, reading, and writing with a greater emphasis on academic and workforce preparation. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 906—ESL: LOW ADVANCED ENGLISH FOR LIFE AND WORK  
Formerly listed as ESL 921 - English At Work 2  
Prerequisite: Satisfactory completion of ESL 905 or qualification by the MJC assessment process. Low advanced level English for speakers of other languages. Instruction and practice in listening, speaking, reading, and writing with great emphasis on transition to academic programs, the workplace, and job-training courses. Repeatable. Field trips may be required. (Non-Graded course) Lecture.

ESL 45 or equivalent course.

FAMELF (Family Life)

Dean: Maurice McKinnon, EdD  
Division Office: John Muir Hall, Room 57  
Phone: (209) 575-6343  
Division website: www.mjc.edu/prospective/programs/fcs/index.html

FAMELF 131—FAMILY RELATIONSHIPS  
3 UNITS  
The family and its interpersonal relationships, the formation and development of the family, adjustments within the family, the family cycle, 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: 3D,E) (IGETC: 4G)

FAMELF 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

FAMELF 355X,A—THE CHILD IN THE FAMILY  
½, 1 UNIT  
Formerly listed as ESL: Intermediate  
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)

FAMELF 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)

FAMELF: NON-CREDIT COURSES

FAMELF 800—PARENT EDUCATION  
3 UNITS  
Recommended for Success: Satisfactory completion of CLDDV 245  
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. Lecture.
FDNTR — (Food & Nutrition)

Dean: Maurice McKinnon, EdD
Division Office: John Muir Hall, Room 57
Phone: (209) 575-6343
Division website: www.mjc.edu/prospective/programs/fcs/index.html

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) Lecture. Transfer: (CSI, UC)(TCSU 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. (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) Lecture. General Education: (MJC-GE: A)

FDP — (Food Processing)

Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html

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., GMPs, SSPOs, 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)

FDP 369 — 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)

FDP 380 — FOOD PRODUCTS MICROANALYSIS -A 1 UNIT
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)

FDP 381 — FOOD PRODUCTS MICROANALYSIS -B -MOLD COUNTING 2 UNITS
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)

FDP 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)

FDP 383 — 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)

FDP 386 — FOOD LABORATORY INSTRUMENTS 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)

FDP 387 — BASIC FOOD PRODUCT MICROANALYSIS 1 UNIT
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)

FDP 388 — FOOD PROCESSING SANITATION AND CLEANUP 1 UNIT
Introduction to the fundamentals of food processing equipment, cleaning and sanitation, types of cleaning agents, residue problems, cleaning methods and techniques. Two maximum completions. Field trips may be required. Lecture. (A-F Only)

FDP 342 — INTRODUCTORY WINE EVALUATION 1 UNIT
Introduction to the fundamentals of food processing equipment, cleaning and sanitation, types of cleaning agents, residue problems, cleaning methods and techniques. Two maximum completions. Field trips may be required. Lecture. (A-F Only)

Limits on Enrollment: Students must be at least 21 year of age, as this is the legal age for alcohol consumption.
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. Materials Fee Required Three maximum completions. Field trips are required. (P/NP Only) Lecture.
**FDSER**  
**Food Service**

**Dean:** Maurice McKinnon, EdD  
**Division Office:** John Muir Hall, Room 258-W  
**Phone:** (209) 575-6373  
**Division website:** www.mjc.edu/prospective/programs/fcs/index.html

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**FILM**

**Dean:** Michael Sundquist  
**Division Office:** Performing and Media Arts Center, Room 205  
**Phone:** (209) 575-6081  
**Division website:** www.mjc.edu/arts  
**Instructors:** Carol Lancaster Mingus, Laura Paull

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**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. This class will focus on single camera "film style" and techniques utilizing video production equipment. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture. **MJC Activities. Transfer:** (CSU, UC)

**FILM 151—ADVANCED FILM PRODUCTION 1**  
3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete FILM 150 with a minimum grade of C or better satisfactorily complete 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 30-minute feature film. Materials fee required. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture/Lab. **Transfer:** (CSU, UC)

**FILM 152—ADVANCED FILM PRODUCTION 2**  
3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete FILM 151 and satisfactorily complete RATV 142.

Continuation of FILM 151. Emphasis on the development of leadership skills, directing techniques and professional caliber filmmaking. This course will also provide advanced experience in group filmmaking while producing a 15-25 minute film. All individual and group work will be geared towards submission into student film festival competitions. Materials fee required. Two completions allowed. Field trips may be required. (A-F or P/NP) Lecture. **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. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture. **Transfer:** (CSU, UC) **General Education:** (MJC-GE.C)

**FILM 154—MOVIES WITH A MESSAGE**  
3 UNITS  
Also offered as SOSSC 154.

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.) Viewing and discussion of selected documentaries will be used to enhance this visual art form. (A-F or P/NP) Lecture. **Transfer:** (CSU) **General Education:** (MJC-GE.C)(CSU-GE.C1)

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**FREN**  
**French**

**Dean:** Patrick Bettencourt  
**Division Office:** Journalism 180  
**Phone:** (209) 575-6149  
**Division website:** www.mjc.edu/current/programs/divdeps/litlang/  
**Instructors:** Ines Bucknam

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**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. (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 written and spoken French, simple composition, conversation, and reading. Field trips may be required. (A-F or P/NP) Lecture. **Transfer:** (CSU, UC) **General Education:** (MJC-GE.C)(CSU-GE.C2) (IGETC: 6A)

**FREN 102—FRENCH 2**  
5 UNITS  
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. Lecture. (A-F or P/NP) **Transfer:** (CSU, UC) **General Education:** (MJC-GE.C)(CSU-GE.C2) (IGETC: 3B,6A)

**FREN 103—FRENCH 3**  
5 UNITS  
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. Students will write short essays. (A-F or P/NP) **Transfer:** (CSU, UC) **General Education:** (MJC-GE.C)(CSU-GE.C2) (IGETC: 3B, 6A)

**FREN 104—FRENCH 4**  
5 UNITS  
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) **Transfer:** (CSU, UC) **General Education:** (MJC-GE.C)(CSU-GE.C2)(IGETC: 3B,6A)
FSCI (Fire Science)

Dean: George Bondrookas
Director: John Soia (209) 575-7030
Division Office: Regional Fire Training Center, 1220, Fire Science Lane
Phone: (209) 575-7028

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 3 UNITS
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. Student may repeat if required by regulation. Field trips may be required. (A-F Only) Lecture. Transfer: (CC FIRE 1)

FSCI 302—FIRE PREVENTION TECHNOLOGY 3 UNITS
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 3 UNITS
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—BLDG CONSTRUCTION FOR FIRE PROTECTION 3 UNITS
Prerequisite: Satisfactory completion of FSCI 301
Formerly listed as FSCI 329. Fundamentals of building construction as it relates to fire protection. Introduction to building materials and processes that are involved in the construction of structures. Provide students with the knowledge required to operate safely and effectively within residential or commercial buildings. Four completions allowed. Field trips may be required. (A-F Only) Lecture. (CC FIRE 4)

FSCI 305—FIRE BEHAVIOR AND COMBUSTION 3 UNITS
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 2 UNITS
Prerequisite: Satisfactory completion of FSCI 356 with a minimum grade of C or better.
Provides chief officers or chief officer candidates with knowledge of contemporary management issues and concepts. Key topics include: governmental relations, changing settings/policy formation, program management, personnel, labor relations, and legal environment. Materials Fee Required Student may repeat if required by regulation. Field trips may be required. (A-F Only) Lecture/Lab

FSCI 311—RESCUE SYSTEMS 1 2 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to have received California State Fire Training's Firefighter One Certification or have satisfactorily completed FSCI 363.
Topics include: 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 and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture

FSCI 322—FIRE SERVICE CAREER DEVELOPMENT/PROMOTIONS 3 UNITS
Prerequisite: Satisfactory completion of FSCI 301.
Introduction to Fire Service Career Development. This course of instruction is designed to assist fire science students to prepare for entry level and interdepartmental Fire Service examinations. To be considered an eligible candidate students must have a working knowledge of fire service testing standards and terminology. Students will collect information for the application processes, resume writing, entry level written tests, mechanical aptitude and oral interviews. Students are also instructed on aspects of pre-employment medical and psychological tests and background checks. Field trips may be required. (A-F Only) Lecture/Lab

FSCI 323—FIRE HYDRAULICS 3 UNITS
Required for Success: Before enrolling in 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 3 UNITS
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) Lecture/Lab

FSCI 328—INVESTIGATION OF FIRES 4 UNITS
Prerequisite: Satisfactory completion of FSCI 301 with a minimum grade of C or better.
Determining cause of fires (accidental, suspicious and incendiary); types of fires; related laws; introduction to arson and incendiary; recognizing and preserving evidence; interviewing witnesses and suspects; arrest and detention procedures; court procedures and giving court testimony. Field trips may be required. (A-F Only) Lecture/Lab

FSCI 332—FIRE FIGHTING TACTICS AND STRATEGY 3 UNITS
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 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete FSCI 301.
Rescue problems and techniques; emergency rescue equipment; toxic gases; chemicals and diseases; radiation hazards; care of victims, including resuscitation, extraction, and other emergency conditions. Field trips may be required. (A-F Only) Lecture

FSCI 337—WILDLAND FIRE CONTROL 3 UNITS
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 2 UNITS
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 2 UNITS
Prerequisite: Satisfactory completion of FSCI 354 and FSCI 355.
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. Materials Fee Required. Field trips may be required. (A-F Only)

FSCI 350—FIRE COMMAND 1A 2 UNITS
Prerequisite: Satisfactory completion of FSCI 301 with a minimum grade of C or better.
Fundamental skills for the First-in Incident Commander and company officers. Instruction and simulation time pertaining to the initial decision and action processes at a working fire. Topics include the fire officer, fire behavior, fireground resources, operations, and management. Materials Fee Required Student may repeat if required by regulation. Field trips are not required. (A-F Only) Lecture/Lab
COURSES OFFERED

FSCI 351—FIRE COMMAND 1B  
Prerequisite: Satisfactory completion of FSCI 301 with a minimum grade of C or better. 
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. Materials Fee Required. Field trips may be required. Lecture/Lab. (A-F Only)

FSCI 352—TRAINING INSTRUCTOR 1A  
Prerequisite: Satisfactory completion of FSCI 301 
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. (A-F Only)

FSCI 353—TRAINING INSTRUCTOR 1B  
Prerequisite: Satisfactory completion of FSCI 352 
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 with a minimum grade of C or better. 
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. Materials fee required. Field trips might be required. (A-F Only)

FSCI 355—FIRE PREVENTION 1B  
Prerequisite: Satisfactory completion of FSCI 301 and FSCI 354. 
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. Materials Fee Required. Field trips are required. (A-F Only)

FSCI 356—FIRE MANAGEMENT 1  
Prerequisite: Satisfactory completion of FSCI 301 with a minimum grade of C or better. 
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. Materials Fee Required. Field trips may be required. (A-F Only) Lecture/Lab.

FSCI 357—FIRE INVESTIGATION  
Prerequisite: Satisfactory completion of FSCI 301 with a minimum grade of C or better. 
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. Materials Fee Required. Field trips are required. (A-F Only) Lecture/Lab.

FSCI 362—BASIC FIRE ACADEMY  
Prerequisite: Satisfactory completion of FSCI 301. 
Limitations on Enrollment: Students must possess CPAT certification because they wear self-contained breathing apparatus equipment, so they must meet physical and medical requirements in order to ensure safety, per NFPA 1582 regulation. Acceptance into program by Fire Academy Selection Committee; consideration of acceptance based upon completion of application process. 
Basic knowledge and skills of a fire fighter as set by the State Fire Marshal. Successful completion of the course fulfills the educational requirement for Fire Fighter I. Materials Fee Required. Field trips are required. (A-F Only) Lecture/Lab. Transfer: (MUC FSCI 362 & 363=CC FIRE7, FIRE 50, FIRE 101, FIRE 106, FIRE 108, FIRE 110)

FSCI 363—ADVANCED FIRE ACADEMY  
Prerequisite: Satisfactory completion of FSCI 362. 
Advanced Fire Academy is the second of two courses of the Fire Academy designed for the individual who desires a career as a professional firefighter. This course includes instruction in ventilation, vehicle extrication, ICS 200, 67-hr Wildland Firefighting, Confined Space Awareness, Low-Angle Rope Rescue Operations, Hazmat Operations/Decon. Materials Fee Required. Field trips are required. (A-F Only) Lecture/Lab. Transfer: (MUC FSCI 362 & 363=CC FIRE7, FIRE 50, FIRE 101, FIRE 106, FIRE 108, FIRE 110)

FSCI 364—FIRE APPARATUS DRIVER/OPERATOR 1A  
Prerequisite: Satisfactory completion of FSCI 357 with a minimum grade of C or better. 
This course provides a 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. Materials Fee Required. Field trips may be required. (A-F Only)

FSCI 365—FIRE APPARATUS DRIVER/OPERATOR 1B  
Prerequisite: Satisfactory completion of FSCI 357 with a minimum grade of C or better. 
Continued development of a fire fighter’s career. Operation of emergency vehicle and pump operations. How to drive and maintain various types of vehicles. Pump operation and uses for water sources and determining water flow. Materials fee required. Field trips may be required. (A-F Only) Lecture/Lab. Transfer: (CC FIRE 29A & 29B)

FSCI 366—EMERGENCY AID FIRST RESPONDER  
1 UNIT 
Limitations on Enrollment: Before enrolling in this course, students are strongly advised to satisfactorily complete FSCI 362. 
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete FSCI 362. Limitations on Enrollment: Enrollment limited to students who possess a valid California Driver’s License, class B, firefighter restricted (minimum).

FSCI 367—FIRE INVESTIGATION 1B  
Prerequisite: Satisfactory completion of FSCI 357 with a minimum grade of C or better. 
Continued development of a fire fighter’s career. Operation of emergency vehicle and pump operations. How to drive and maintain various types of vehicles. Pump operation and uses for water sources and determining water flow. Materials fee required. Field trips may be required. (A-F Only) Lecture/Lab. Transfer: (CC FIRE 29A & 29B)

FSCI 368—FIRE APPARATUS DRIVER/OPERATOR 1B  
Prerequisite: Satisfactory completion of FSCI 357 with a minimum grade of C or better. 
This course provides a 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. Materials Fee Required. Field trips may be required. (A-F Only)

FSCI 371—FIRE COMMAND 2A  
Prerequisite: Satisfactory completion of FSCI 350 with a minimum grade of C or better. 
Prepares Fire Officers to use management techniques and Incident Command System when commanding multiple alarms or large combat forces. Materials Fee Required. Field trips may be required. Lecture/Lab. (A-F Only)

FSCI 372—FIRE MANAGEMENT 2B  
Prerequisite: Satisfactory completion of FSCI 356 with a minimum grade of C or better. 
Continued development of a fire fighter’s career. Operation of emergency vehicle and pump operations. How to drive and maintain various types of vehicles. Pump operation and uses for water sources and determining water flow. Materials fee required. Field trips may be required. (A-F Only) Lecture/Lab. Transfer: (CC FIRE 29A & 29B)

FSCI 373—FIRE INSTRUCTOR 2A  
Prerequisite: Satisfactory completion of FSCI 362. 
The first of three classes for California State Fire Training, Fire Instructor II certification. Advanced skill development for instructors who are responsible for evaluating performance. Course work provides the student with the techniques of evaluation. Course content includes construction of written and performance tests. Students will apply concepts of test planning, test analysis, test security, and test evaluation to determine instructor and student effectiveness. This is an essential course for writing valid and objective Fire Service tests. Materials Fee Required. Field trips are not required. (A-F Only) Lecture/Lab.

FSCI 374—FIRE INSTRUCTOR 2B  
Prerequisite: Satisfactory completion of FSCI 362. 
Continued development of a fire fighter’s career. Operation of emergency vehicle and pump operations. How to drive and maintain various types of vehicles. Pump operation and uses for water sources and determining water flow. Materials Fee Required. Field trips are not required. (A-F Only) Lecture/Lab. Transfer: (CC FIRE 29A & 29B)
FSCI NON-CREDIT COURSES

FSCI 860 — ADVANCED MEDICAL FIRST RESPONDER COURSE
Prerequisite: Satisfactory completion of FSCI 365
Designed to meet Emergency Medical Service requirements for recertification of police and fire personnel designated as first responders to the scenes of medical emergencies. Eight maximum completions. Lecture/Laboratory.

FTECH (Fire Technology)

FTECH 301XABC — INCIDENT COMMAND SYSTEMS
Limitations on Enrollment: Enrollment limited to students who are certified firefighters.
Provides description and detail of the Incident Command System (ICS) organization and operations in supervisory roles on all types of emergency incidents. Materials fee required. Student may repeat if required by regulation. Field trips may be required. (A-F or P/NP) Lecture.

GENED (General Education Preparation/Counseling)

Dean (Interim): Dean Tsuruda
Division Office: Morris Memorial Building, Room 103
Phone: (209) 575-6680
Division website: www.mjc.edu/prospective/getting_started/advising/index.html

GENED 956 — GED PREPARATION
General review of all basic high school subjects in preparation for the General Education Development tests (G.E.D.), and to provide students with knowledge required for entry and success in college programs. Repeatable. Field trips are not required. (Non-Graded course) Lecture.
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: (MJC-GE: A)(CSU-GE: B1,B3)(IGETC: 5A)

GEOL 165 — GEOLOGY OF CALIFORNIA  3 UNITS
The geologic setting and evolution of California’s geomorphic 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: (MJC-GE: A)(CSU-GE: B1)(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: (MJC-GE: A)(CSU-GE: B1,B3)(IGETC: 5A)

GEOL 171X,A,B — GEOLOGY FIELD STUDIES  ½,1,2 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete or concurrently enroll in a geology or earth science course. 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. Materials fees required. Transfer: CSU

GERM 101 — GERMAN 1  5 UNITS
Essentials of written and spoken German, simple composition, conversation and reading. Field trips may be required. Lecture/Laboratory. Equivalent to the satisfactory completion of two years high school German. Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 6A)

GERM 102 — GERMAN 2  5 UNITS
Prerequisite: Satisfactory completion of GERM 101.

GERON 101 — AGING IN AMERICA  3 UNITS
Formerly listed as HUMSR 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/Counseling)

Dean (Interim): Dean Tsuruda
Division Office: Moriots Memorial Building, Room 103
Phone: (209) 575-6880
Division website: www.mjc.edu/prospective/getting_started/advising/index.html
Instructors: Aida Garcia, Barbara St. Urbain, Dana Hanlon, Dean Tsuruda, Eric Ivory, Eva Rivera-Jara, Hanna Louie, Kim Bailey, Linda Wong, Marcos Garcia, Mary Silva, Pam Critten, Pam Loyd, Ron Tingley, Theresa Maldonado-Ballance, Tina Giron

The Guidance program is an integral part of the counseling services. Students who take guidance 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—INTERNATIONAL STUDENT/NEW AMERICAN FOCUS

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 extracurricular 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. MJC Guidance. Transfer: CSU (CC GUIDE 107)

GUIDE 110—EDUCATIONAL PLANNING

Acquaints MJC students with the college, its curriculum, facilities, services, academic regulations, vocational and certificate programs, degree and transfer requirements. Students must complete a conference with a counselor during the semester. An educational plan is developed according to each student’s needs and goals. Field trips are not required: (P/NP Only) Lecture. MJC Guidance. Transfer: CSU (CC GUIDE 107)

GUIDE 111—CAREER AWARENESS

Assists students in exploring career alternatives through development of skills necessary for the research, selection and planning of a life-long career. The role of attitudes, 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. Materials Fee Required: Field trips are not required: (P/NP Only) Lecture. MJC Guidance. Transfer: CSU (CC GUIDE 11)

GUIDE 112—JOB HUNTING SKILLS

Formerly listed as GUIDE 112 - Job Employment Skills. Realities of the job market and techniques for conducting a successful job search. Emphasis on learning about job application procedures, resume writing and interviewing skills. Students must complete an appointment with a counselor during the semester. Two maximum completions. Field trips are not required: (P/NP Only) Lecture. MJC Guidance. Transfer: CSU (CC GUIDE /BUSAD 25)

GUIDE 116—ORIENTATION FOR RE-ENTRY ADULTS

Recommended for Success: Before enrolling in this course, students are strongly advised to speak, write, and understand the English language.

Designed to help new or returning adult students be successful in college after having been out of school for a number of years. Acquaints students with college services, programs, and requirements, and numerous topics related to academic and career success. These topics include academic transitions, self-exploration, educational planning, study skills, time management, learning styles, goal setting, career exploration, and other topics related to student success. Students must complete a conference with a counselor during the semester. An educational plan will be developed based on student’s academic and career goals. Field trips are not required: (P/NP Only) Lecture / Discussion. MJC Guidance. Transfer: CSU

GUIDE 120—SUCCESS STRATEGIES FOR TRANSFER STUDENTS

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)

Dean: William Kaiser
Division Office: PE Office Building, Room 105
Phone: (209) 575-6269
Division website: www.mjc.edu/athletics
Instructors: Cheryl Mulder, David Shook, Demitriusz Szaer, Eric Fischer, Jim Stevens, Mary Shea, Michael Giardi, Milan Motroni, Paul Branch, Shawn Black, Steve Arstotelous

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

A basic course for an Emergency Services professional or the citizen who wishes to maintain or acquire cardio pulmonary resuscitation (CPR) and basic first aid certification. Successful course completion results in certification in CPR and Standard First Aid. Materials fee required. Four completions allowed. Field trips are not required: (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HHP 62)

HE 101—EMERGENCY RESPONSE/CPR FPR

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 of the sick and injured. CPR for the Health Care Provider and First Responder certification issued upon satisfactory completion. Materials fee required. Four completions allowed. Field trips are not required: (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC EMS 13)

HE 110—HEALTHFUL LIVING

A consideration of factors in the selection of a plan for healthful living. Emphasis on self-assessment through gathering and analyzing information while setting new health goals. The course focuses on emotional, physical, social/spiritual, intellectual and environmental wellness in achieving human potential. Field trips are not required: (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HHP 60) General Education: (MJC-GE: E) (CSU-GE: E)

HE 111—WOMEN’S HEALTH ISSUES

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 completions allowed. Lecture. Transfer: CSU.

### HIST (History)

**Dean**: Vacant  
**Division Office**: Journalism 150  
**Phone**: (209) 575-6129  
**Division website**: mjc.edu/prospective/programs/bbss/  
**Instructors**: Eileen Kerr, Curtis Martin, Eva Mo, Bill Newell, Al Smith

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
<th>Transfer:</th>
<th>General Education:</th>
<th>Division Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 101—HISTORY OF THE UNITED STATES TO 1877 3 UNITS</td>
<td>Formerly listed as HIST 101—History of the United States Through Reconstruction Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of United States history to 1877 exploring the intersection of politics, the economy, society, culture and geography. Periods covered include: American societies to 1492, the colonial period, the American Revolution, creation of the U.S. Constitution and federalism, the early national period, the antebellum period, the Civil War and Reconstruction. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 16)</td>
<td>3</td>
<td>(MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a, c)</td>
<td>CSU, UC (CC HIST 17) (TCSU HIST 140) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a, c)</td>
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<td>HIST 102—HISTORY OF THE UNITED STATES POST CIVIL WAR 3 UNITS</td>
<td>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 international 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)</td>
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<td>(TCSU HIST 140) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a, c)</td>
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<td>HIST 104—WESTERN CIVILIZATION TO 1650 3 UNITS</td>
<td>Formerly listed as HIST 104—Western Civilizations Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of the social, economic, political, religious, intellectual, and cultural development of Western Civilization from the Neolithic to the Reformation. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B, C) (CSU-GE: D6) (IGETC: 4F)</td>
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<td>HIST 105—WESTERN CIVILIZATION SINCE 1650 3 UNITS</td>
<td>Formerly listed as HIST 105—Western Civilization Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of the political, economic, social, and cultural changes in the history of Western Civilization from 17th century Absolutism to the present. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B, C) (CSU-GE: D6) (IGETC: 4F)</td>
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<td>HIST 106—WORLD CIVILIZATION TO THE 16TH CENTURY 3 UNITS</td>
<td>A comparative and interactive investigation and analysis of World Civilization as related to the development of the modern world. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 13) (TCSU HIST 150) General Education: (MJC-GE: B, C) (CSU-GE: C2, D6) (IGETC: 3B, 4F)</td>
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<td>HIST 107—WORLD CIVILIZATION FROM THE 16TH CENTURY 3 UNITS</td>
<td>Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. A comparative study of World Civilizations from 1500 to the present. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 14) General Education: (MJC-GE: B, C) (CSU-GE: D6) (IGETC: 4F)</td>
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<td>HIST 111—WORLD ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS</td>
<td>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: D6) (IGETC: 4F) (AI: Group a)</td>
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<td>HIST 115—ECONOMIC HISTORY OF THE UNITED STATES 3 UNITS</td>
<td>Study of the history of women in the United States, their experiences and contributions from the pre-colonial period to the present. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 21) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a)</td>
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<tr>
<td>HIST 116—WOMEN IN AMERICAN HISTORY 3 UNITS</td>
<td>Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Study of the history of women in the United States, their experiences and contributions from the pre-colonial period to the present. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 21) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a)</td>
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<td>HIST 117—SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES PRIOR TO THE 20TH CENTURY 3 UNITS</td>
<td>Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. The second in a two-part series, HIST 117 examines the development of American society and culture before the 20th century. HIST 117 specifically analyzes the formation and evolution of American social institutions in response to Indigenous American and Immigration European and African cultures. This course focuses on the history of race, gender, class, political economy, economy and education in the United States from the colonial period to the present. Emphasis is placed on the evolution of State and Federal constitutional government and the principle of inclusion. Field trips are not required. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F) (AI: Group a)</td>
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<td>HIST 118—HISTORY OF MEXICO 3 UNITS</td>
<td>Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of Mexican history from the first Mesoamerican civilizations through the present, exploring the intersection of politics, the economy, society, culture, and geography. Periods covered include: Mesoamerica, the colonial period, independence, La Reforma, the Porfiriaton, the Mexican Revolution and its aftermath, and the post WWII period. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D3, D6) (IGETC: 4F)</td>
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Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101.
HIST 128—HISTORY OF 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. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 55) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F)

HIST 129—HISTORY OF CALIFORNIA 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of California history from the first peoples to inhabit this region through the present. The course explores the intersection of politics, the economy, society, culture, and geography and the way it has contributed to the formation of contemporary California. Emphasis comparing and contrasting the historical development of California to that of the rest of the nation. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HIST 11) General Education: (MJC-GE: B) (CSU-GE: D6) (IGETC: 4F)

HIST 145—HISTORY OF LATIN AMERICA 3 UNITS
Formerly listed as HIST 145 - Latin American History
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Survey of Latin American history through the present, emphasizing changes and continuities in the political, economic, social, and cultural life of the continent. Examines issues such as: the colonial legacy, development and underdevelopment, ideas of race and ethnicity, relationship to the outside world, the construction of the nation-state, gender, and social, economic, and political movements. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D3, D6) (IGETC: 4F)

HIST 154—AFRICAN AMERICANS THROUGH THE 19TH CENTURY 3 UNITS

HIST 155—AFRICAN AMERICANS IN THE 20TH AND 21ST CENTURIES 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Second in a two-part series. Examines the 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, Latinos/Chicano Americans, and African American ethnic groups. 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 civil rights, human rights, and economic justice. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: B) (CSU-GE: D3, D6) (IGETC: 4C, 4F) (AI: Group a)

HUMAN 101—INTRODUCTION TO THE HUMANITIES 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to be eligible for ENGL 101. Introduction to major works of the humanities that focuses on the diversity of human experience and the relationships among arts and ideas. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) 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) (CC HUMAN 1) General Education: (MJC-GE:C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 106—HUMANITIES IN THE MODERN WORLD 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101. Study of creative and intellectual achievements from cultures around the world, beginning with 1600’s and extending into the 20th centuries. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HUMAN 2) General Education: (MJC-GE:C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 110—EAST MEETS WEST 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to be eligible 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC HUMAN 3) General Education: (MJC-GE:C) (CSU-GE: C2) (IGETC: 3B)

HUMAN 130—INTRODUCTION TO WESTERN RELIGIONS 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to be eligible for ENGL 101. Origins and development of the three monotheistic religions of Western Civilization: Judaism, Christianity and Islam; scripture, beliefs, traditions, rituals, and celebrations; scripture of all three faiths, along with architecture and arts. Field trips may be required. (A-F or P/NP) 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. (A-F or P/NP) Transfer: (CSU, UC) General Education: (MJC-GE:C) (CSU-GE: C2) (IGETC: 3B)
HUMSR (Human Services)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/prospective/programs/bbss/
Instructors: Kimberly Kennard

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. Lecture. (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
Introduces students to the human services professions, 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 UNIT
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 related fields. Recognition and understanding of social problems, and the impact on human behavior. Lecture. (A-F or P/NP) 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 related fields. Clinical skills, assessment tools, techniques, crisis intervention strategies, and resolution will be covered. Lecture. (A-F or P/NP) 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. Field trips may be required. (A-F only) Lecture. Transfer: CSU

HUMSR 114—DEATH AND DYING 3 UNITS
Recommended for Success: 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: (MJC-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 drug 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. Lecture. (A-F or P/NP) Transfer: CSU (CC PSYCH 33)

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. Lecture. (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) 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. Lecture. (A-F or P/NP) Transfer: CSU

HUMSR 142—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. Field trips may be required. Lecture. (A-F or P/NP) Transfer: CSU (CC PSYCH 33) General Education: (MJC-GE:B)
HUMSR 144—COMMUNITY AGENCY PRACTICUM DISCUSSION 1 UNIT
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, 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. Field trips are not required. (A-F or P/NP). Lecture. Transfer: CSU

HUMSR 145A, 145B, 145D—COMMUNITY AGENCY PRACTICUM
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. Lecture/Lab. (A-F or P/NP). Transfer: CSU

IIS (Individualized Instruction and Services)
Division Office: Special Programs, Morris, 112B
Phone: (209) 575-6702

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 completions allowed. 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 completions allowed. 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 completions allowed. 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 completions allowed. 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 completions allowed. 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 completions allowed. 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 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. Lecture. (A-F only) Transfer: CSU.

INTDS (Interior Design)
Dean: Maurice McKinnon, EdD
Division Office: John Muir Hall, Room 157
Phone: (209) 575-6343
Division website: www.mjc.edu/prospective/programs/nts/index.html

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 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  
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  
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) Transfer: CSU

INTDS 145—FUNDAMENTALS OF LIGHTING DESIGN  
Fundamentals of lighting design, theory, and application, including both aesthetic and technical considerations. 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. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 150—HISTORY OF INTERIORS/DECORATIVE ARTS 1  
Overview of the development of interior architecture and furniture styles of the world from Antiquity to the Classical Revival Period of the nineteenth century. Covers dominant social, economic, technological influences, and innovations affecting design and development of specific styles and periods. Description of dominant influences and characteristics of interiors, furniture, ornamental design, and decorative arts, architecture, and textiles. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 155—HISTORY OF INTERIORS DECORATIVE ARTS 2  
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

INTDS 160—ASIAN DESIGN AND DECORATIVE ARTS 3  
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—UNIVERSAL DESIGN FOR HEALTH, SAFETY, & WELFARE  
Formerly listed as INTDS 180 - Barrier-Free Design, Codes & Regulations. 
Global design decisions related to environmental, social, cultural, economic and physiological needs. Concepts of universal, accessible, adaptable, barrier-free, aging-in-place, and lifespan design. Related ADA guidelines, local, state, and federal codes will be discussed. Includes survey of appropriate interior finishes, materials and resources. Space planning considerations for specific needs, issues relating to aging population and life style. Field trips are not required. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 190—SUSTAINABLE AND GREEN DESIGN 3  
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  
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 socioeconomics considerations. Field trips may be required. Lecture. Transfer: CSU

INTDS 210—INTRODUCTION TO SALES & MARKETING FOR DESIGN 3  
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  
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. Lecture/Laboratory. Transfer: CSU

INTDS 220—INTERIOR FINISHES CONSTRUCTION MATERIALS 3  
Analysis, application and evaluation of the materials and components of Interior Design and Architecture. Emphasis will be placed on the selection, specification and estimation of cost and installation criteria. Introduction to local and regional design resources, the influence of style and innovations in technology and sustainability. Flooring, paint and wall coverings, window treatments, textiles, furnishings and various surface materials will be included. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 225—SPACE PLANNING 3  
Formerly listed as Residential Space Planning. 
Research and development of design solutions based on human factors, codes, and interior environmental issues. Application of the design process to interior design projects. Structural and non-structural components of interior environments are included. Skills in drafting and presentation techniques are emphasized. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 245—KITCHEN AND BATH DESIGN 3  
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 product and materials are made based upon the survey of the client’s needs. Cabinetry, appliances, finish materials, barrier-free design and changing family patterns, reflecting current materials, innovations, technology, and regulations. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU

INTDS 250—COMPUTER AIDED DRAFTING/DESIGN FOR INTERIOR DESIGN 3  
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 NFIBA 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  
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
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.

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<th>Course Code</th>
<th>Course Title</th>
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<td>INTEC 200</td>
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<td>INTEC 261</td>
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INTEC 262—HYDRAULICS/PNEUMATICS  3 UNITS
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.

INTEC 301—EMPLOYABILITY SKILLS 1  2 UNITS
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: Team Building, Safety, Time and Money Management. Field trips may be required. Lecture/Laboratory.

INTEC 302—EMPLOYABILITY SKILLS 2  2 UNITS
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/Lab.

INTEC 303—INTRODUCTION TO TEAMWORK DEVELOPMENT FOR INDUSTRY  1 UNIT
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  3 UNITS
Formerly listed as INSAF 361
Also offered as MGSA 306 May need to take out!
Introduction to the principles and techniques of occupational safety and health. Lecture. (A-F Only)

INTEC 312—BEARINGS  ½ 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  1 UNIT
Also offered as ELTEC 320

INTEC 340—UNIFORM BUILDING CODE, STRUCTURAL  3 UNITS
Formerly listed as INDED 369
Review of building plans for compliance with structural engineering requirements as per the Uniform Building Code. Four completions allowed. Lecture. (A-F Only)

INTEC 341—UNIFORM BUILDING CODE, NON-STRUCTURAL  3 UNITS
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 completions allowed. Lecture. (A-F Only)

INTEC 344—UNIFORM MECHANICAL CODE  3 UNITS
Formerly listed as INDED 371
Minimum code requirements for the installation of heating, ventilating, cooling, and refrigeration systems in residential and commercial applications. Four completions allowed. Lecture. (A-F Only)

INTEC 346—ENFORCEMENT OF BUILDING REPAIR AND ABATEMENT REGULATIONS  3 UNITS
Formerly listed as INDED 374
General review of housing regulations and their application to existing structures. Four completions allowed. Lecture. (A-F Only)

INTEC 350—INDUSTRIAL TECHNOLOGY INTERNSHIP  2 UNITS
Prerequisite: Minimum of 15 units completed in Industrial Technology major. Supervised field experience in Industrial Technology. Study and research related to job training. Two maximum completions. Lecture. Field experience arranged. (P/NP only) (Spring)

INTEC 362—INDUSTRIAL REFRIGERATION SYSTEMS  2 UNITS
Principles underlying heat transference as used in refrigeration systems. Explanation of devices and equipment used in industrial refrigeration systems. Formerly listed as INDED 363. Field trips may be required. (A-F only) Lecture.

INTEC 366—HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION  2 UNITS
Formerly listed as INDED 366
Principles of installation and maintenance of heating and cooling systems in residential and industrial facilities. Four completions allowed. Lecture/Laboratory (A-F only)

INTEC 367—PLUMBING PRINCIPLES AND METHODS  2 UNITS
Formerly listed as INDED 368
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. (A-F Only)

INTEC 376—MECHANICAL BLUEPRINT READING  2 UNITS
Also offered as ENGT 376
Recommended for Success: Before enrolling in this course, students are strongly advised to have a basic working knowledge of personal computers. 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) Lecture/Lab.

INTEC 379—UNIFORM PLUMBING CODE  3 UNITS
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 completions allowed. (A-F Only)

INTEC 380—ELEMENTARY CARPENTRY AND CONSTRUCTION  5 UNITS
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, A,B—ADVANCED MANUFACTURING TRAINING  1½, 2 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)

INTEC 391—ADVANCED MANUFACTURING TRAINING  ½ 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)

Dean: Patrick Bettencourt
Division Office: Journalism 180
Phone: (209) 575-6149
Division website: www.mjc.edu/current/programs/dvdeps/italang/
Instructors: Gabriele Steiner

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.

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.

ITAL 101 — ITALIAN 1 5 UNITS
General Education: (MJC-GE:C)(CSU-GE: C2)(IGETC: 6A)

JRNAL (Journalism)

Dean: Michael Sundquist
Division Office: Performing and Media Arts Center, Room 205
Phone: (209) 575-6081
Division website: www.mjc.edu/arts
Instructor: Laura Paull

JRNAL 100 — REPORTING AND WRITING FOR THE MEDIA 3 UNITS
Prerequisite: Satisfactory completion of ENGL 50 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)(EC JRNAL 1)

JRNAL 120B,C — MULTIMEDIA NEWS PRODUCTION STAFF 2 - 3 UNITS
Formerly listed as Newspaper Photo Staff
Prerequisite: Satisfactory completion of JRNAL 100.
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. Lecture/Lab. (A-F or P/NP).
MJC Activities Transfer: CSU

JRNAL 146B,C — PIRATES' LOG PHOTO STAFF 2 - 3 UNITS
Formerly listed as Newspaper Photo Staff
Prerequisite: Satisfactory completion of ART 170.
Photo production for the college newspaper and online news medium, the Pirates' Log, offering practical experience in photojournalism. Students fulfill photographic assignments for publication; perform digital post-production tasks; remodel photos for print and for the web edition; and design photo essays, including the writing of text, captions and headlines. Student work is published regularly and can be used to build a portfolio. Students gain experience working with subjects and writers, and develop proficiency in Photoshop, workflow and other photography software used in the industry. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab.
MJC Activities Transfer: CSU

LIBR (Library and Information Technology)

Dean: Dr. Tobin Clarke
Division Office: East Campus, Library 122
Phone: (209) 575-6062
Division website: www.mjc.edu/current/quickreferences/librarylrc.html
Instructors: Ellen Dambrosio, Iris Carroll, James Clarke, Kathleen Ennis, Sue Adler, Wendy Griffths-Bender

The division of Library & Information Technology 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. Library & Information Technology courses are transferable to four-year colleges and universities.

LIBR 100 — RESEARCH METHODOLOGY 2 UNITS
Formerly listed as LR 100
Introduction to academic information sources, including traditional print resources, ebooks, online periodical and research databases, and the World Wide Web. Emphasis on the development of effective research strategies, and the retrieval, evaluation, and use of information for academic research assignments. Field trips are not required. (A-F or P/NP).
Transfer: CSU

LIBR 120 — LIBRARY RESEARCH ON THE INTERNET 1 UNIT
Formerly listed as LR 120 - Library Research on the World Wide Web
Introduction to online research, 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 library catalogs, online periodical and research databases, subject directories, and search engines. Evaluation of online information and documentation of online sources in APA and MLA formats. Field trips are not required. (A-F or P/NP).
Transfer: CSU
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/Lab. (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/Lab. (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/Lab. (A-F or P/NP) 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. Lecture/Lab. (A-F or P/NP) 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 course 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. Lecture/Lab. (A-F or P/NP) Transfer: CSU

MACH 220 — CNC MACHINE TOOL PROGRAMMING 2 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to be familiar with basic metal cutting practices, machine tool setup, and calculation of cutting tool speeds and feeds as encountered in the operation of manual lathes and milling machines; and have a working knowledge in the operation of personal computers; and have a basic understanding of formatting, structure, and codes used in the Word Address Format system of CNC programming.
The use of CAM (Computer Aided Manufacturing) programming techniques and software to develop tool path codes required to machine products using CNC milling and turning equipment. Materials Fee Required. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture/ Lab. 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/Lab/Others. 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. Lecture/Lab. (A-F or P/NP), Materials fee required. 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/Lab. (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, band saw 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/Lab. (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 301.
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/Lab. 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, fixtureing, cutting tool materials and geometry, die casting and plastic injection molding. Field trips may be required. Three maximum completions. Lecture/Lab. 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 macro 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. Lecture/Lab. (P/NP Only)
MACH 312—4 AXIS MILL PROGRAMMING AND OPERATION 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have had previous programming experience on CNC machining centers using word address format language.
Application and practice of programming, installing, and operating 4th axis rotary devices on CNC vertical machining centers. Materials fee required. Two completions allowed. Field trips may be required. (P/NP Only) Lecture/Lab.

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. Lecture/Lab. (P/NP Only).

MACH 395—ADVANCED MACH TOOL TECHNOLOGY LAB 1-3 UNITS
Formerly listed as MACH 395C
Prerequisite: Satisfactory completion of MACH 211 or MACH 301 or MACH 218 or MACH 219 or MACH 220 or MACH 222.
Provides access to a Machine Tool Technology laboratory setting for advanced students for the purpose of continued skills development applicable to production machining processes. Three maximum completions. Field trips are not required. (P/NP Only) Lab.

MATH
Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/

MATH 10—INTRODUCTION TO MATHEMATICS 4 UNITS
Recommended for success: Qualification by MJC 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 (A-F or P/NP)
**COURSES OFFERED**

**MATH 20—PRE-ALGEBRA**  
Prerequisite: Qualification by MJC 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 reviewed includes: integers, decimals, ratios, and percents. Lecture. (A-F or P/NP).

**MATH 47—SKILLS FOR SUCCESS IN NON-TRANSFER LEVEL COURSES**  
½ UNIT  
Formerly listed as MATH 47 - Skills for Success in Elementary Algebra  
Designed to provide practice in basic mathematical skills needed for success in non-transfer level math courses. Particularly useful for those who are weak in prerequisite skills or who have struggled in other non-transfer level mathematics courses. NOTE: MATH 47 DOES NOT serve as a prerequisite to any mathematics course. Four completions allowed. Field trips are not required. (P/NP Only) Lab.

**MATH 49—SKILLS FOR SUCCESS IN TRANSFER LEVEL MATH COURSES**  
½ UNIT  
Formerly listed as MATH 49 - Skills for Success in Intermediate Algebra  
Designed to provide practice in mathematical skills needed for success in transfer level mathematics courses. Particularly useful for those who are weak in prerequisite skills or who have struggled in intermediate algebra or precalculus courses. NOTE: MATH 49 DOES NOT serve as a prerequisite to transferable mathematics courses. Four completions allowed. Field trips are not required. (P/NP Only) Lecture/Lab.

**MATH 50—BUSINESS MATHEMATICS**  
3 UNITS  
Prerequisite: Satisfactory completion of MATH 20 or qualification by the 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. Field trips are not required. (A-F or P/NP) Lecture.

**MATH 70—ELEMENTARY ALGEBRA**  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 20 or qualification by the MJC assessment process. 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. Field trips are not required. (A-F or P/NP) Lecture. (CC MATH 101)

**MATH 71—ELEMENTARY ALGEBRA 1**  
3 UNITS  
Prerequisite: Satisfactory completion of MATH 20 or qualification by the MJC assessment process. 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. Field trips are not required. (A-F or P/NP) Lecture. (CC MATH 100A)

**MATH 72—ELEMENTARY ALGEBRA 2**  
3 UNITS  
Prerequisite: Satisfactory completion of MATH 71. 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. Field trips are not required. (A-F or P/NP) Lecture. (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).

**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.

**MATH 90—INTERMEDIATE ALGEBRA**  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 70 or MATH 71 and MATH 72 or qualification by the MJC assessment process. Equivalent to second year high school algebra. Topics include linear, quadratic, exponential and logarithmic functions and equations; complex numbers; solving systems of equations using substitution, matrices and determinants; conic sections; sequences, series and combinatorics. Field trips are not required. (A-F or P/NP) Lecture (CE 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 the MJC assessment process. A general education course emphasizing the role of mathematics in civilization, the nature of mathematical thought, and applications of mathematics. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MATH 6) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

**MATH 105—STRUCTURE OF MATHEMATICS 1**  
4 UNITS  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the 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, numeration systems, number theory, logic. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MATH 4A) General Education: (MJC-GE: D2)(CSU-GE: B4)

**MATH 106—STRUCTURE OF MATHEMATICS 2**  
4 UNITS  
Prerequisite: Satisfactory completion of MATH 105. Elementary probability, statistics and geometry for prospective elementary school teachers. Includes Euclidean geometry, measurement, and analytic geometry. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MATH 4B) 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 to 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  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the 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, logarithmic equations and graphs; systems of equations and inequalities (linear and nonlinear), 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. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MATH 17A) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

**MATH 122—PRE-CALCULUS 2**  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 121. Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 80. Together with MATH 121, a two-semester Precalculus course sequence. A comprehensive course in analytic geometry and trigonometry. Topics include: vectors, rotation of axes, conic sections, polar and parametric functions, and trigonometric functions & graphs with applications. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MATH 17B) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

**Transfer:**

General education, transferable mathematics courses. Four completions allowed. Field trips are not required. (P/NP Only) Lecture.
MATH 130 — FINITE MATHEMATICS 3 UNITS
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process. Set theory, probability and counting techniques, Markov chains, matrices and linear systems, linear programming (Simplex Method), applications to business and behavioral and social sciences. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC MATH 12) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

MATH 134 — ELEMENTARY STATISTICS 5 UNITS
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process. Elements of descriptive and inferential statistics, including probability, discrete and continuous probability distributions, hypothesis testing, regression analysis, ANOVA, and nonparametric statistics. Materials fee required. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC MATH 2) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2)

MATH 138 — CALCULUS FOR BUSINESS AND SOCIAL SCIENCES 3 UNITS
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process. Concepts of function and limit, applied calculus emphasizing techniques of differentiation and integration for business economics applications; partial derivatives. Lecture. (A-F or P/NP) Transfer: (CSU, UC). General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

CALCULUS

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 18A)(TCSU MATH 210)(TCSU MATH SEQ A) General Education: (MJC-GE: D2)(CSU-GE: B4)(IGETC: 2A)

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)(TCSU MATH 220)(TCSU MATH SEQ A)(CC MATH 18B) General Education: (MJC-GE: D2)(CSU-GE:B4)(IGETC: 2A)

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, multiple integration, applications of partial differentiation and integration, and line and surface integrals. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(TCSU MATH 230) General Education: (CSU-GE:B4)(IGETC:2A)

MATH 174 — INTRODUCTION TO LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS 5 UNITS
Prerequisite: Satisfactory completion of MATH 173. Linear algebra topics including linear equations, vector spaces, scalar products, linear transformations, determinants and eigenvalues. Differential equation topics including solutions to first order equations, higher order linear equations, series solutions, systems of equations, and Laplace transforms. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(TCSU MATH 260) General Education: (CSU-GE:B4)(IGETC:2A)

MDAST (Medical Assisting)

Dean: Maurice McKinnon, EdD
Division Office: John Muir Hall, Room 258-W
Phone: (209) 575-6373
Division website: www.mjc.edu/alliedhealth
Instructors: Shirley Buzbee

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 OFTEC 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 judgment 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) Lab. Materials fee required.
MDAST 350—MEDICAL TRANSCRIPTION 3 UNITS
Recommended for Success: Satisfactory completion of MDAST 321, OFADM 203 or equivalent, OFADM 311 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 321.
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). Unlimited 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 352 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 352, and MDAST 353.
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 (Meteorology)
Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/
Instructors: Noah Hughes

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, UC) General Education: (MJC-GE:A)(CSU-GE: B1, B3)(IGETC:5A)

MICRO (Microbiology)
Dean: Brian Sanders
Division Office: Science Building, Room 126
Phone: (209) 575-6173
Division website: www.mjc.edu/current/programs/divdeps/sme/
Instructors: Erynn Lucas

MICRO 101—MICROBIOLOGY 4 UNITS
Prerequisite: Satisfactory completion of BIO 116 or BIO 101 or BIO 111 and CHEM 143.
Includes the study of microorganisms, microbial metabolism, genetics, and varieties, immunity, infections, and antimicrobials. Intended mainly for student entering the health professions. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC) (CC BIOL 65) General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: 5B)
MUSIC DEPARTMENT COURSE ID CROSSWALK

In the 2009-2010 MJC academic year, the Music Department has new course ID's. Below is a crosswalk that will allow you to quickly identify new course IDs for what formerly were MUSIC courses.

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New Departments:

- MUSA: Music: Applied
- MUSC: Music: Commercial
- MUSE: Music: Ensembles
- MUSG: Music: General
- MUSI: Music: Independent Activities in
- MUSP: Music: Stage Production
- MUST: Music: Theory

MUSA 121 — ELEMENTARY PIANO

1 UNIT

Formerly listed as MUSIC 120

Essentials of music notation; fundamentals of rhythm, tone production and the coordinated use of both hands; introduction of scales and chords; methods of practice and memorization. Completion of MUSA 121, Elementary Piano is recommended for all general elementary teaching candidates. Electronic keyboard lab and acoustic upright piano practice rooms available. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab MJC Activities. Transfer: (CSU, UC) (CC MUSIC 31A)

MUSA 122 — PIANO ENRICHMENT

1 UNIT

Formerly listed as MUSIC 131

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 completions allowed. Lecture/Laboratory. MJC Activities. Transfer: (CSU, UC)

MUSA 123 — INTERMEDIATE PIANO

1 UNIT

Formerly listed as MUSIC 122

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 122. Further study of piano technique, tone production, efficient use of physical self, detailed study diatonic scales and harmonic progressions, attention given to improving sight reading skills, learning process, musical interpretation of the score, memorization techniques and performance skills; introduction to intermediate level repertoire from various stylistic periods; participation in live performance demonstrations as well as live student recital at the end of term. Four Maximum completions. Field trips might be required. (A-F or P/NP) Lab MJC Activities Transfer: (CSU, UC) (CC MUSIC 41A & 41B)
MUSA 124—ADVANCED PIANO 2 UNITS
Formerly listed as MUSC 123
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 123.
Study of advanced piano playing techniques; review of scales and arpeggios in both major and minor modes; study of advanced repertoire from various stylistic periods. Emphasis on preparation of solo repertoire for live performances. Four completions allowed. Field trips may be required. (A-F Only) /Lab. MJC Activities Transfer: (CSU, UC)

MUSA 131—ORGAN 1 1 UNIT
Formerly listed as MUSC 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 completions allowed. Lecture/Laboratory. Not offered every semester. MJC Activities Transfer: (CSU, UC)

MUSA 132—ORGAN 2 1 UNIT
Formerly listed as MUSC 125
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 completions allowed. Lecture/Laboratory. (A-F or P/NP) MJC Activities Transfer: (CSU, UC)

MUSA 133—ORGAN 3 1 UNIT
Formerly listed as MUSC 126
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 completions allowed. Lecture/Laboratory. (A-F or P/NP) MJC Activities Transfer: (CSU, UC)

MUSA 135—ELEMENTARY HARPSCICHORD 1 UNIT
Formerly listed as MUSC 181
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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. Four completions allowed. Field trips are not required. (A-F or P/NP) Lecture/Lab. MJC Activities Transfer: (CSU, UC)

MUSA 141—ELEMENTARY GUITAR 1 UNIT
Formerly listed as MUSC 163
Examination of the basic elements of classical guitar technique and repertoire. Technical work 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, opened finger chords, and bar chords. The student is responsible for providing a nylon-stringed classical guitar, a guitar tuner, and a footstool. All students will perform in a semi-formal performance at the end of the semester. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities Transfer: (CSU, UC) (CC MUSIC 49)

MUSA 142—GUITAR PERFORMANCE 1 UNIT
Formerly listed as MUSA 142 and MUSC 164
Prerequisite: Satisfactory completion of MUSA 141.
Continuation of MUSA 141. Focus on group performances and an introduction to solo performance. Students will learn to follow notation up to the fifth position in solo and smaller ensembles. Intermediate techniques including tremolo, flamenco strumming, and harmonic playing. Technical exercises and techniques to develop finger independence. A classical, nyln-string guitar is strongly recommended for use in the course. Four completions allowed. Field trips are not required. (A-F or P/NP) Lecture. MJC Activities Transfer: (CSU, UC)

MUSA 143—GUITAR ENRICHMENT 1 UNIT
Formerly listed as MUSA 143 and MUSC 174 — Guitar Advancement
Prerequisite: Satisfactory completion of MUSA 141.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 142.
Improvement of guitarist's accompaniment technique, analytical skills, and performance competence. Music education majors are strongly encouraged to enroll. Special attention will be given to performance in solo and group settings. Students will be required to participate in a formal recital at the end of the term. A nylon-stringed classical or flamenco guitar is required for the course. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities Transfer: (CSU, UC)

MUSA 144—INTERMEDIATE GUITAR 1 UNIT
Formerly listed as MUSC 165
Prerequisite: Satisfactory completion of MUSA 141.
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 142 or satisfactorily complete MUSA 143.
Further development of guitar performance skills and techniques. Particular attention will be given to technical exercises and the performance practices surrounding the classical and flamenco intermediate repertoire. Students will need a nylon-stringed classical guitar. Two public performances (mid-term and final) will be connected to this course. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities Transfer: (CSU, UC)

MUSA 145—APPLIED CLASSICAL GUITAR 1 UNIT
Formerly listed as MUSC 166
Corequisite: Concurrent enrollment required in or satisfactory completion of MUSA 144.
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 forty-five minute recital as a completion requirement for the course. A fifteen-minute jury may substitute for the recital requirement. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture. MJC Activities Transfer: (CSU, UC) (CC MUSIC 50)

MUSA 151—ELEMENTARY VOICE 1 UNIT
Formerly listed as MUSC 133
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 141.
Development of 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. This is the first of two preparatory courses for students who intend to take voice classes at the major level. Three completions allowed. Field trips may be required. (A-F or P/NP) Lecture. MJC Activities Transfer: (CSU, UC) (CC MUSIC 36)

MUSA 152—ELEMENTARY VOICE 2 1 UNIT
Formerly listed as MUSC 132: Voice Enrichment
Recommended for Success: Before enrolling in this course, students are strongly advised to have previous vocal experience.
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 completions allowed. Lecture/Laboratory. MJC Activities Transfer: (CSU, UC) (CC MUSIC 37)

MUSA 153—APPLIED VOCAL REPERTOIRE 1 UNIT
Formerly listed as MUSC 133 — Intermediate Voice
Concurrent Enrollment required in MUSA 155
Recommended for Success: Before enrolling in this course, students are strongly advised to have a choral background or previous voice lessons.
Limitation on enrollment: Enrollment limited to students possessing the ability to read music and sing within the vocal range.
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. This class is intended for voice majors. Necessary for transfer to a four-year University as a music major. Four Maximum completions. Field trips are not required. (A-F or P/NP) Lab. MJC Activities Transfer: (CSU, UC) (CC MUSIC 39)
MUSA 154—APPLIED VOCAL REPERTOIRE 2 1 UNIT
Formerly listed as MUSIC 154
Prerequisite: Satisfactory completion of MUSA 153.
Corequisite: Concurrent enrollment required in MUSA 155.
Limitations on Enrollment: Enrollment limited to students who have an intermediate to advanced level of sight reading and singing within the vocal register.
Continuation of MUSA 153 with greater emphasis on building repertoire, development of style, and preparation for transfer auditions, auditions in general and recitals. Recital and public performance participation required. Class is intended for voice majors. This is a necessary class to transfer as a music major to a four-year university. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: (CSU, UC) (CC MUSIC 56)

MUSA 155—VOCAL MASTER CLASS 1 UNIT
Formerly listed as MARCH 155
Corequisite: Concurrent enrollment required in MUSA 153 or MUSA 154.
Development of vocal performance through the consideration and application of good vocal technique, performance practice and dramatic character development; principles applied through recital attendance and through solo, duet or ensemble performances in class and public recitals. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: CSU

MUSA 161—ELEMENTARY STRINGS 1 UNIT
Formerly listed as MUSC 127
Introduction to playing orchestral stringed instruments (violin, viola, cello, or bass). Designed for students with no previous instrumental music experience, students who wish to review fundamentals of string playing, or experienced instrumentalists who wish to learn a new instrument. Students must own or have access to a bowed string instrument. Public performance required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: (CSU, UC)

MUSA 163—APPLIED MUSIC (VIOLIN AND VIOLA) 1 UNIT
Formerly listed as MUSC 128
Corequisite: Concurrent enrollment required in MUSE 161 or MUSE 165. Recommended for Success: Before enrolling in this course, students are strongly advised to play a violin or viola at an intermediate level and demonstrate the ability to read music.
Study and performance of violin or viola technique and literature. Public performance participation required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: (CSU, UC)

MUSA 164—APPLIED MUSIC (CELLO AND BASS) 1 UNIT
Formerly listed as MUSC 129
Corequisite: Concurrent enrollment required in MUSE 161 or MUSE 165 or MUSE 861. Recommended for Success: Before enrolling in this course, students are strongly advised to play a cello or bass at an intermediate or advanced level and demonstrate the ability to read music.
Study and performance of cello or bass technique and literature. Recital and public performance participation required. Repeatable up to 4 units maximum. Field trips may be required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: (CSU, UC)

MUSA 173—APPLIED MUSIC (BRASS AND PERCUSSION) 1 UNIT
Formerly listed as MUSA 173 and MUSC 142
Limitations on Enrollment: Enrollment limited to students who pass audition.
Study and performance of brass and percussion solo literature, etudes, scales, and technical studies. Intended for music majors and/or advanced players. Recital and public performance participation required. Student must own or have access to an instrument appropriate for this course. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture. MJC Activities Transfer: (CSU, UC)

MUSA 183—APPLIED MUSIC (WOODWINDS) 1 UNIT
Formerly listed as MUSC 144
Limitations on Enrollment: Enrollment limited to students who pass audition.
Study and performance of woodwind solo literature, etudes, scales, and technical studies. Intended for music majors and/or advanced players. Recital and public performance participation required. Student must own or have access to an instrument appropriate for this course. Field trips may be required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lecture. MJC Activities Transfer: (CSU, UC) (CC MUSIC 52)

MUSC (Music: Commercial)

MUSC 111—RECORDING ARTS 1 2 UNITS
Formerly listed as MUSIC 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

MUSC 112—RECORDING ARTS 2 2 UNITS
Formerly listed as MUSIC 178
Also offered as RATV 178
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 plug-ins, automation techniques, mixing and mastering in the recording process. Laboratory time required. Materials fee required. Four completions allowed. MJC Activities Transfer: CSU

MUSC 121—INTRODUCTION TO THE SYNTHESIZER AND MIDI 2 UNITS
Formerly listed as MUSIC 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. Four completions allowed. Field trips are not required. (A-F or P/NP) Lecture / Lab. MJC Activities Transfer: SU

MUSC 122—ELECTRONIC MUSIC 2 1 UNIT
Formerly listed as MUSIC 171
Also offered as RATV 178
Recommended for Success: Satisfactory completion of MUSC 121 or previous synthesizer/tape recording and MID1 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 completions allowed. Laboratory. (A-F or P/NP) MJC Activities Transfer: CSU

MUSC 126—MUSIC PRODUCTION FOR MULTIMEDIA 2 UNITS
Formerly listed as MUSIC 168
Also offered as RATY 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. Lecture / Lab. MJC Activities. (A-F or P/NP) 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**  
1 UNIT

Formerly listed as MUSC 173

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 141 or be concurrently enrolled in MUSA 141.

Emphasis on guitar ensemble repertoire, preparation, and performance. Required participation and performance in large and small ensembles. Students will be assigned to groups that will perform in mandatory graded concert performances throughout the course. Students should be prepared to perform in different venues and represent the college’s guitar department. Four completions allowed. Field trips are required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

**MUSE 151—MASTERWORKS CHORUS**  
1 UNIT

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 66)

**MUSE 155—CONCERT CHOIR**  
1 UNIT

Formerly listed as MUSC 152

Limitation an 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 completions allowed. Rehearsal/Other: (A-F or P/NP) MJC Activities. Transfer: (CSU, UC)

**MUSE 156—CHAMBER CHOIR**  
1 UNIT

Formerly listed as MUSC 153—Singers

Prerequisite: Satisfactory completion of audition.

A small choral ensemble for advanced singers. Public performances of historically and culturally varied music. Field trips required. Four completions allowed. Rehearsal/Other: MJC Activities. Transfer: (CSU, UC) (CC MUSIC 69)

**MUSE 161—COMMUNITY ORCHESTRA**  
1 UNIT

Formerly listed as MUSC 162

Recommended for Success: Before enrolling in this course, students are strongly advised to have experience playing a musical instrument.

Rehearsal and public performance of orchestral music written for a full orchestra, including works in popular, brass, and percussion. Repertoire will include works from many eras and a variety of cultures. Focus on developing ensemble balance and tone color, good intonation, rhythmic and stylistic integrity. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC) (CC MUSIC 76)

**MUSE 165—STRING ORCHESTRA**  
1 UNIT

Formerly listed as MUSC 150

Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUSA 163 or satisfactorily complete MUSA 164 or.

Prerequisite: Satisfactory completion of MUSA 150.

Limited enrollment: Enrollment limited to students who have satisfactorily completed MUSA 150.

A choral ensemble for advanced level singers. Study and performance of either one large-scale work or program of shorter works. Public performances required. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

**MUSE 166—CHAMBER MUSIC ENSEMBLES (STRINGS)**  
1 UNIT

Formerly listed as MUSC 151

Recommended for Success: Before enrolling in this course, students are strongly advised to demonstrate ability to read music and play an instrument at an advanced level.

Rehearsal and performance of chamber ensemble literature. Ensembles may include strings, woodwinds, or piano. Public performance required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC) (CC MUSIC 78)

**MUSE 171—CONCERT BAND**  
1 UNIT

Formerly listed as MUSC 161

Recommended for Success: Before enrolling in this course, students are strongly advised to have previous experience in instrumental music and to have the ability to read music. Students must own or have access to an appropriate instrument. Rehearsal and performance of original wind literature and transcriptions for concert band.

Field trips may be required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

**MUSE 175—SYMPHONIC BAND**  
1 UNIT

Formerly listed as MUSC 146

Recommended for Success: Before enrolling in this course, students are strongly advised to have previous experience playing in a band and have the ability to read music.

Rehearsal and performance of original wind band literature and transcriptions for band. Public performances are required. Field trips may be required. Student must own or have access to an appropriate instrument. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

**MUSE 176—CHAMBER ENSEMBLES (BAND INSTRUMENTS)**  
1 UNIT

Recommended for Success: Before enrolling in this course, students are strongly advised to have at least two years of experience on their instrument, and to be able to read music notation, and satisfactorily complete MUSE 175 and/or satisfactorily complete 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 performance participation required. Student must own or have access to an appropriate instrument. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

**MUSE 181—JAZZ BAND**  
1 UNIT

Recommended for Success: Before enrolling in this course, students are strongly advised to have previous experience playing jazz music (one player per part). Students must own or have access to an appropriate instrument.

Study and performance of jazz literature in both traditional and contemporary styles. Public performances required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC) (CC MUSIC 78)

**MUSE 185—EVENING JAZZ BAND**  
1 UNIT

Formerly listed as MUSC 147

Recommended for Success: Before enrolling in this course, students are strongly advised to have previous experience playing jazz ensemble music (one player per part). Student must own or have access to an instrument appropriate for this course.

Study and performance of jazz literature in both traditional and contemporary styles. Public performances are required. Field trips may be required. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC) (CC MUSIC 72)

**MUSE: NON-CREDIT COURSES**

**MUSE 851—MASTERWORKS CHORUS**  
Formerly listed as OLDAD 854

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

Study and performance of a combination of large-scale and shorter works for orchestra. Public performance. Field trips may be required. Laboratory/Rehearsal. Unlimited repeats. Not a graded course.

**MUSE 871—CONCERT BAND**  
Formerly listed as OLDAD 861

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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSG 101</td>
<td>MUSIC APPRECIATION</td>
<td>3</td>
</tr>
<tr>
<td>MUSG 111</td>
<td>INTRODUCTION TO AMERICAN POPULAR MUSIC</td>
<td>3</td>
</tr>
<tr>
<td>MUSG 121</td>
<td>HISTORY OF WESTERN MUSIC 1</td>
<td>3</td>
</tr>
<tr>
<td>MUSG 122</td>
<td>HISTORY OF WESTERN MUSIC 2</td>
<td>3</td>
</tr>
</tbody>
</table>

**MUST** — (Music: Theory)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUST 101</td>
<td>MUSIC FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>MUST 102</td>
<td>MUSIC FUNDAMENTALS 2</td>
<td>3</td>
</tr>
<tr>
<td>MUST 103</td>
<td>MUSIC, BIRTH TO K: THEORY AND PRACTICE</td>
<td>3</td>
</tr>
</tbody>
</table>

### MUSI — (Music: Independent Activities)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSI 349 A-D</td>
<td>WORK EXPERIENCE IN THE ARTS – SUPERVISED PRACTICE</td>
<td>1</td>
</tr>
</tbody>
</table>

### MUSP — (Music: Stage Production)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSP 151</td>
<td>MUSICAL THEATRE WORKSHOP</td>
<td>2</td>
</tr>
<tr>
<td>MUSP 153</td>
<td>ADVANCED MUSICAL THEATRE WORKSHOP</td>
<td>2</td>
</tr>
</tbody>
</table>

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For any remaining courses, please refer to the official course catalog for detailed descriptions, prerequisites, and credit descriptions.
MUST 111—RHYTHMIC SKILLS 1 UNIT
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 inflection and artistic phrasing. Four completions allowed. Lecture. Not offered every semester. Transfer: CSU

MUST 120—MUSIC THEORY REVIEW 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MUST 101 or MUST 102, 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, triads, inversions, figured bass, Roman numeral analysis. Four completions allowed. (A-F or P/NP) Lecture. Transfer: CSU

MUST 121—MUSIC THEORY 1 3 UNITS
Prerequisite: Satisfactory completion of MUST 101.
Corequisite: Concurrent enrollment required in MUST 121 and MUST 130.
Brief review of primary Music Fundamentals topics: Tonality, Introduction to common harmonic practice through exercises in part writing and figured bass, simple guided composition, and analysis. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MUSIC 20A) General Education: (MJC-GE-C) (CSU-GE-C1) (IGETC-3A)

MUST 122—MUSIC THEORY 2 3 UNITS
Prerequisite: Satisfactory completion of MUST 121.
Corequisite: Concurrent enrollment required in MUST 112 and MUST 130.
Continuing development of technique in common harmonic practice through Roman numeral analysis, partwriting, figured bass, and guided composition exercises. Introduction to tonization and secondary dominants, introduction to phrase and period structure. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) (CC MUSIC 20B) General Education: (MJC-GE-C) (CSU-GE-C1) (IGETC-3A)

MUST 123—MUSIC THEORY 3 3 UNITS
Prerequisite: Satisfactory completion of MUST 122
Concurrent Enrollment: MUST 131
Recommended for Success: Concurrent enrollment in MUST 133.
Continuation of the 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
Prerequisite: Satisfactory completion of MUST 123
Concurrent Enrollment: MUST 130
Recommended for Success: Concurrent enrollment in MUST 134.
Continued 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 21B) General Education: (CSU-GE-C1) (IGETC-3A)

MUST 130—PRACTICAL MUSICA 1 UNIT
Prerequisite: Concurrent enrollment required in MUST 121 or MUST 122 or 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 completions allowed. Field trips are not required. (A-F or P/NP) Lab. Transfer: MJC Activities. Transfer: CSU

MUST 131—AURAL SKILLS 1 1 UNIT
Prerequisite: Satisfactory completion of or concurrent enrollment in MUST 121
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) (CC MUSIC 4A) (TCSU MUS 160)

MUST 132—AURAL SKILLS 2 1 UNIT
Prerequisite: 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) Lab. Transfer: (CSU, UC) (CC MUSIC 4B)

MUST 133—AURAL SKILLS 3 1 UNIT
Prerequisite: Satisfactory completion of MUST 132
Recommended for Success: Concurrent enrollment in MUST 133.
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. Transfer: (CSU, UC) (CC MUSIC 5A)

MUST 134—AURAL SKILLS 4 1 UNIT
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)
Dean: Mark A. Anglin
Division Office: Agriculture, Room 100
Phone: (209) 575-6200
Division website: www.mjc.edu/prospective/programs/agens/index.html
Instructors: Mike Morales, Dale Pollard

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 as related to natural and human systems. Soil as a natural system including chemistry, ecology and geology. Soil use and management including erosion, moisture retention, structure, cultivation and organic matter. Special emphasis placed on the relationship between natural and agronomic soil systems. Laboratory topics include soil type, classification, soil chemistry, water and nutrient management and soil microbiology. Field trips are required. (A-F Only) Lecture/Lab. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B1, B3) (IGETC: 5A)

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 NATRE 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. Lecture/Lab. (A-F Only) Transfer: (CSU, UC)(CC FORES 10) 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. Lecture/Lab. (A-F Only) Transfer: CSU (CC NATRE 160)

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. Lecture/Lab (A-F Only) Transfer: CSU

NR 376—FOREST TECHNOLOGY 3 UNITS
Recommended for success: Satisfactory completion of NR 220 or NR 222 or NR 224. 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 FORES 10) Transfer: (CC FORES 162)

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) Transfer: (CC NATRE 22)

NURSE 115—INTRODUCTION FOR NURSING MAJORS ½ UNIT
Formerly listed as NURSE 115 - Guidance for Nursing Majors
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 degree in 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) Lecture. Transfer: CSU

NURSE 259—LVN TRANSITION: ROLE CHANGE PREPARATION 2 UNITS
Formerly listed as NURSE 259 - LVN Transition: Preparing for a Role Change
Limitations on Enrollment: Limited to licensed Vocational Nurses with an active license with IV certification. Board of Registered Nursing (BRN) requires Associate Nursing Degree programs to provide a pathway for LVNs to enter an ADN program. This course fulfills one of the BRN’s requirements.
Prerequisite: Satisfactory completion of ANAT 125, MICRO 101, PHYSIO 101 and ENGL 101 and a score of 67 or greater on the Test of Essential Academic Skills (TEAS). Course prerequisites and TEAS score are the same requirements for qualification for entry into the generic ADN program. The focus of this course is on nursing knowledge and skills that the LVN student needs in order to provide the basis for transition of information and skills required of the registered nurse. Content includes nursing process as it applies to the adaptation theory of nursing practice, LVN role transition to registered nurse, assessment of physical and psychosocial adaptations, pharmacology, and math for medication calculation. Emphasis is on critical thinking in the clinical setting as it applies to nursing practice. Materials Fee Required. Field trips are not required. (A-F Only) Lecture/Lab. 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. (Fall, Spring)(A-F Only) Transfer: CSU
NURSE 262 — NURSING PROCESS: SKILLS ½ UNIT
Prerequisite: Satisfactory completion of NURSE 260 and NURSE 261.
Corequisite: Concurrent enrollment in NURSK 800.
Limitations on Enrollment: Enrollment limited to program capacity.
This course prepares the nursing student to perform nursing skills necessary for satisfactory participation in the obstetrics and pediatric clinical setting. Skills included in this course are: intravenous therapy, gavage feeding, infant bathing, delivery table set-up, and correct administration of medications. Materials Fee Required Field trips are not required. (P/NC/P Only) Lab Transfer: CSU

NURSE 263 — NURSING PROCESS: MATERNITY 4 UNITS
Prerequisite: Satisfactory completion of NURSE 262.
Corequisite: Concurrent enrollment in NURSK 800.
Limitations on Enrollment: Program requires it by using a non-evaluative process to limit enrollment from among a pool of qualified students.
Applies the basic principles and concepts of the nursing process to meet the needs of the childbearing woman, the childbearing family and the 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 are not required. (A-F Only) Lecture/Lab Transfer: CSU

NURSE 264 — NURSING PROCESS: PEDIATRICS 4.5 UNITS
Prerequisite: Satisfactory completion of NURSE 261 and NURSE 262.
Corequisite: Concurrent enrollment required in NURSK 800.
Limitations on Enrollment: Admission to the ADN program. Enrollment limited to program capacity.
Applies the principles and concepts of the nursing process to meet the adaptation needs of the pediatric patient and patient with alterations of the reproductive system. Family-centered care in the hospital and outpatient settings will be emphasized. Throughout the course health maintenance and prevention of illness is emphasized in patient/family teaching. Field trips are not required. (A-F Only) Lecture/Lab Transfer: CSU

NURSE 265 — NURSING PROCESS: MEDICAL-SURGICAL 6 UNITS
Prerequisite: Satisfactory completion of NURSE 260 and NURSE 261 and NURSE 262 and NURSE 263 and NURSE 264.
Corequisite: Concurrent enrollment in NURSK 800.
Limitations on Enrollment: Acceptance into the ADN program. Enrollment limited to program capacity.
Applies the principles and concepts of the nursing process that focuses on promoting adaptation of adolescent through senescent clients with serious or complex alterations in health. 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. Materials Fee Required Field trips may be required. (A-F Only) Lecture/Lab Transfer: CSU

NURSE 266 — NURSING PROCESS: MENTAL HEALTH 4 UNITS
Formerly listed as NURSE 253 - Nursing Process 3
Prerequisite: Satisfactory completion of NURSE 262, 263, and 264.
Corequisite: Concurrent enrollment in NURSK 800.
Limitations on Enrollment: Admission to the ADN program. Concurrent enrollment required in NURSK 800.
Enrollment limited to: MJC Nursing Program capacity.
Applies the principles and concepts of the nursing process 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. (Fall, Spring)(A-F Only) Transfer: CSU

NURSE 267 — NURSING PROCESS: ADVANCED MEDICAL-SURGICAL 11 UNITS
Prerequisite: Satisfactory completion of NURSE 265 and NURSE 266.
Corequisite: Concurrent enrollment in NURSK 800.
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 the clinical skills learned in previous semesters, acquires new skills and takes a clinical competency test in the acute care setting. The 5 1/2 week, 180-hour preceptorship is the capstone of the nursing program, encompassing all the clinical, technical and critical thinking skills learned in the program, and emphasizing leadership in management of patient care. In preceptorship, the student works directly with a registered nursing preceptor in the acute care facility. Materials Fee Required Field trips are not required. (A-F Only) Lecture/Lab Transfer: CSU

NURSE 350 — VOCATIONAL NURSE 1 14 UNITS
Enrollment limited to those admitted to the CNA program. (A-F Only)
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/Laboratory. Field trips required. (A-F Only)

NURSE 351 — VOCATIONAL NURSE 2 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 3 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, urinay system, endocrine system and the eye, ear, nose, and throat. Practical experience will be gained in a skilled nursing facilities, health care clinics and acute care settings. Lecture/Laboratory. (A-F Only)

NURSE 353 — VOCATIONAL NURSE 4 9 UNITS
Prerequisite: Satisfactory completion of NURSE 352
Applies basic nursing knowledge to the care and needs of adult patients with disorders of the reproductive system, during normal maternity nursing care and pediatric patients. Practical experience will be gained in the acute hospital setting. Nursing leadership principles are introduced. (A-F Only) Lecture/Laboratory. Materials fee required.

NURSE 354 — VOCATIONAL NURSE 5 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 NLNEX-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.

NURSK (Nursing: Skills)
Dean: Maurice McKinnon, EdD
Division Office: John Muir Hall, Room 258-W
Phone: (209) 575-6373
Division website: www.mjc.edu/alliedhealth

NON-CREDIT COURSES

NURSE 800 NURSING SKILLS DEVELOPMENT
Corequisite: Concurrent enrollment in NURSE 259 or NURSE 261 or NURSE 262 or NURSE 263 or NURSE 264 or NURSE 265 or NURSE 266 or NURSE 267 or NURSE 40 or NURSE 350 or NURSE 351 or NURSE 352.
Provides simulated clinical experiences in a supervised laboratory setting for students who must use the Allied Health skills laboratory to achieve the objectives of a course in which they are enrolled. Field trips are not required. (Non-Graded course) Lab
### NURWE — Nursing: Work Experience

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Prerequisites/Co-requisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURWE 361A</td>
<td>WORK EXPERIENCE-NURSING</td>
<td>1</td>
<td>Satisfactory completion of NURSE 260 and NURSE 261.</td>
<td>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 compensated related work experience per semester equals 1 unit or 60 hours uncompensated related work experience. Four completions allowed. Field trips are not required. (P/NP Only) Lab.</td>
</tr>
<tr>
<td>NURWE 362A</td>
<td>WORK EXPERIENCE-NURSING</td>
<td>2</td>
<td>Concurrent enrollment in NURSE 262 or NURSE 263 or NURSE 264 or NURSE 265 or NURSE 266 or NURSE 267 or NURSE 299.</td>
<td>Provides the student enrolled in the ADN program an opportunity to obtain additional 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 compensated related work experience per semester equals 2 units or 120 hours uncompensated related work experience per semester equals 2 units. Four completions allowed. Field trips are not required. (P/NP Only) Lab.</td>
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<tr>
<td>NURWE 385A</td>
<td>WORK EXPERIENCE VOCATIONAL NURSE</td>
<td>1-4</td>
<td>Concurrent enrollment: NURSE 350</td>
<td>The Nursing Work Experience is designed to provide an opportunity for students enrolled in Vocational Nursing Program to participate in relevant work experiences in a community clinical agency participating in nursing work experience. Students acquire knowledge, skills, and attitudes necessary for success in the field of nursing. (P/NP Only)</td>
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### OFADM — Office Administration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Prerequisites/Co-requisites</th>
<th>Description</th>
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<tbody>
<tr>
<td>OFADM 201</td>
<td>INTERMEDIATE KEYBOARDING</td>
<td>1</td>
<td>Before enrolling for this course, students are 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.</td>
<td>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) Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>OFADM 202</td>
<td>INTERMEDIATE KEYBOARDING</td>
<td>2</td>
<td>Before enrolling for this course, students are 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.</td>
<td>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) Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>OFADM 203</td>
<td>INTERMEDIATE KEYBOARDING</td>
<td>3</td>
<td>Before enrolling for this course, students are 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.</td>
<td>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) Lecture. Transfer: CSU</td>
</tr>
<tr>
<td>OFADM 231</td>
<td>INTERMEDIATE WORD PROCESSING</td>
<td>3</td>
<td>Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete CMPSC 231 or OFADM 231. Intermediate word processing features such as mail merge, styles, graphics, tab, and sorts. Features will be applied in creating business documents. Field trips are not required. (A-F or P/NP) Lecture/ Lab. Transfer: CSU</td>
<td></td>
</tr>
<tr>
<td>OFADM 232</td>
<td>ADVANCED WORD PROCESSING AND DESKTOP PUBLISHING</td>
<td>3</td>
<td>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. (A-F or P/NP) Lecture/Laboratory. Transfer: CSU</td>
<td></td>
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<tr>
<td>OFADM 301</td>
<td>BEGINNING KEYBOARDING</td>
<td>1½</td>
<td>Development of basic alpha/numeric keyboarding skills needed for the operation of the keyboard by the touch system. Drills to develop speed and accuracy on straight copy. Designed for students with no previous keyboarding/typewriting experience. Field trips are not required. (A-F Only) Lecture/Lab. Transfer: (MJC OFADM 301 + 302 = CC OFTEC 120)</td>
<td></td>
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</table>
OFADM 302—BEGINNING DOCUMENT PROCESSING 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to complete OFADM 301 or have ability to keyboard by touch at 20 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. Two maximum completions. Field trips are not required. (A-F Only) Lecture/Lab. Transfer: (MC OFTEC 301 + 302 = CC OFTEC 120)

OFADM 303—KEYBOARDING FOR SPEED AND ACCURACY 1½ UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 301 or ability to keyboard by touch at 20 GWAM. Keyboarding course designed to diagnose a student’s current keyboarding skills needs, prescribe appropriate practice materials, measure skill development, increase speed and accuracy, and continually evaluate the skill building process. Three maximum completions. Field trips are not required. (A-F Only) Lab.

OFADM 304—PROFESSIONAL ENGLISH FOR BUSINESS 3 UNITS
Review of the mechanics of correct English usage as applied in the business environment. Emphasis is 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. Field trips are not required. (A-F or P/NP) Lecture.

OFADM 305—RECORDS MANAGEMENT 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to have successfully completed OFADM 353 and be eligible for ENGL 50. 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. (A-F or P/NP) Lecture/Lab.

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. (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. (A-F or P/NP) Lecture.

OFADM 314—OFFICE PROCEDURES & TECHNOLOGIES 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily completed OFADM 202 and OFADM 362; and also have satisfactorily completed OFADM 231 or have prior knowledge of word processing software. A study of the attributes and skills needed to work in the ana office. Explores duties of administration assistants. Covers topics in workplace environment, workforce behaviors, telecommunications, reprographics, oral and written communications, mailing and shipping, and record keeping. (Course only offered during fall semester) Field trips may be required. (A-F or P/NP) Lecture. (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 transcribing 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) Lecture/Lab. Transfer: (CC OFTEC 121 for 328B only)

OFADM 330—BEGINNING WORD PROCESSING 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 301 or another equivalent course. 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 OFADM 356 should enroll in OFADM/CNPS 231. Two completions allowed. Field trips are not required. (A-F or P/NP) Lecture/Lab.

OFADM 353—INTRODUCTION TO COMPUTERS AND WINDOWS 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have the ability to keyboard by touch. Basic introduction to computers and the Windows operating environment. Explains components of a computer system and provides hands-on training using a personal computer. Intended for students new to using personal computers and the Windows environment. Two maximum completions. Field trips are not required. (A-F Only) Lecture/Lab.

OFADM 356—INTRODUCTION TO WORD PROCESSING 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have satisfactorily completed OFADM 301 and/or have the ability to keyboard by touch. Beginning course in the use of word processing software. Features of the software will be explained and demonstrated in a hands-on learning environment. Two maximum completions. Field trips are not required. (A-F Only) Lecture/Lab.

OFADM 359—INTRODUCTION TO SPREADSHEET SOFTWARE 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have satisfactorily completed OFADM 353. Beginning course in the use of spreadsheet software. Features of software will be explained and demonstrated in a hands-on learning environment. Two maximum completions. Field trips are not required. (A-F Only) Lecture/Lab.

OFADM 361—INTRODUCTION TO DATABASES 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have satisfactorily completed OFADM 353, 356, 359, and/or 362. 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. Field trips are not required. (A-F Only) Lecture/Lab.

OFADM 362—INTRO TO BUSINESS PRESENTATION SOFTWARE 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 353. A beginning course using computer software to design slides, outlines, note pages, and audience handouts for business presentations. Two completions allowed. Field trips are not required. (A-F Only) Lecture/Lab.
OFADM 363 — UNDERSTANDING THE INTERNET  1 UNIT
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) Lecture.

OFADM 364 — GRAMMAR IN THE OFFICE  1 UNIT
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) Lecture.

OFADM 366 — PROOFREADING TECHNIQUES  1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to have successfully completed OFADM 304. 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. Field trips are not required. (A-F Only) Lecture/Lab.

OFADM 375 — 10-KEY ON THE COMPUTER  1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete OFADM 301 or have the ability to keyboard by touch. Touch system of numeric keys on the 10-key pad. Field trips are not required. (A-F Only) Lecture.

OLDAD (Older Adults)
Dean: George Booroojan
Division Office: Morris Memorial, Room 204
Phone: (209) 575-6063
Division website: www.mjc.edu/community/enroll/commed/commed-classes/index.html

NON-CREDIT COURSES

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 — LAPIDARY
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)
Dean: William Kaiser
Division Office: PE Office Building, Room 105
Phone: (209) 575-6269
Division website: www.mjc.edu/athletics
Instructors: Bobby Boswell, Demitrius Snaer, Eric Fischer, Jim Stevens, Kurt Olson, Lori Bryhni, Mary Shea, Michael Girardi, Milan Motroni, Paul Aiello, Paul Brogan, Sam Young, Shawn Black, Steve Aristotelous

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, Raquetball, 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 PEVV class listings.

PE 100 — INTRODUCTION 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. Field trips are not required. (A-F Only) Lecture. Transfer: (CSU, UC)

PE 101 — BASKETBALL THEORY  1 UNIT
Basketball rules, mastery of position and team play. Development of strategies and philosophy. Field trips are not required. (A-F Only) Lecture/Lab. Transfer: (CSU, UC)

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. Three maximum completions. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)
COURSES OFFERED

**PE 103—TRACK AND FIELD TEAM CONCEPTS**
1 UNIT
Specialized approach to track and field. Rules, training procedures, strategy, and performance evaluation. Three completions allowed. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)

**PE 104 WRESTLING THEORY**
1 UNIT
Analysis of wrestling, rule interpretation, winning psychology, film analysis. Repeatable up to 2 units maximum. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

**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. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

**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. Field trips are not required. (A-F or P/NP). Lecture/Lab. Transfer: (CSU, UC)

**PE 107—DEFENSIVE BASEBALL THEORY**
2 UNITS
An analysis of defensive techniques, position and team play. Coverage of rules and training procedures. Two maximum completions. Field trips are not required. (A-F or P/NP) Lecture/Lab. 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 and will occur in sporting activities. Field trips are not required. (A-F or P/NP). Lecture. Transfer: (CSU, UC)(CC HHP 4)

**PE 109—PEAK PERFORMANCE THROUGH MENTAL TRAINING**
3 UNITS
Techniques for maximizing sport and dance performance through the development of mental skills and strategies for stress control, imagery, goal setting, and concentration. Field trips are not required. (A-F or P/NP). Lecture. Transfer: (CSU, UC)

**PE 110—OFFICIATING: SPRING SPORTS**
3 UNITS
Regulations and techniques of officiating baseball and softball. Field trips are not required. (A-F or P/NP). Lecture. 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 including rules and physical and mental training. Course designed to prepare the student to compete in collegiate softball. Two maximum completions. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

**PE 114—CROSS COUNTRY CONCEPTS**
1 UNIT
Specialized approach to cross country and long distance running. Training procedures, performance evaluation, nutritional strength, and racing strategy components. Three completions allowed. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)

**PE 115—OFFICIATING: FALL SPORTS**
3 UNITS
Regulations and techniques of officiating football and basketball. Field trips are not required. (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. Exploitation 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. Lecture (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 of P/NP) Transfer: (CSU, UC)

**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
Formerly listed as PE 130. Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 195 or satisfactorily complete PEC 197 or satisfactorily complete PEW 192.

**PE 132—AQUATIC FITNESS & HEALTH INSTRUCTOR**
3 UNITS
Basic competency in designing and implementing fitness programs for a healthy population. Features both practical and theoretical instruction as well as career advice. Emphasis on safe, effective and efficient methods of teaching cardiovascular training, resistance training, balance training and flexibility 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, advanced lifting techniques, the basics of working with special populations, and exercise progression. Field trips are not required. (A-F or P/NP). Lecture. Transfer: (CSU, UC)

**PE 141—SUPERVISION IN ATHLETIC TRAINING**
2 UNITS
Prerequisite: Satisfactory completion of PE 108. Policies and procedures, emergency protocols, vital signs, Bloodborne pathogens, and daily functions that are necessary for the student to work in the Athletic Training Center. Emphasis on effectively and efficient methods of teaching cardiovascular training, resistance training, balance training, and flexibility training for group aquatic exercise. Covers a broad range of exercise physiology, exercise program designs, 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). Lecture. Transfer: (CSU, UC)

**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: (MJC-GE:C)(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 on a paid 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. Lab. (A-F Only) Maximum four completions.
PEA - PEC

PEA (Physical Education: Adapted Activities)

PEA 104—ADAPTED STRENGTH DEVELOPMENT 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to provide medical verification of physical or learning disability or motor problems. Development and maintenance of muscular strength for students with physical/medical limitations. Emphasis on encouraging independence and teaching lifelong fitness knowledge and skills. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEA 106—FUNCTIONAL WATER EXERCISE 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to provide medical verification of physical or learning disability or motor problems. A specialized course involving aquatic exercises which include range of motion, strength, cardiovascular endurance, and flexibility training. Specialized adapted equipment appropriate for limited mobility conditions may be used. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEA 107—ADAPTED SWIMMING 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to provide medical verification of physical or learning disability or motor problems. Basic water safety and swim skills. A specialized course in physical exercise which includes: personalized and group swim exercises which include strength, endurance, flexibility training and instruction in improving and/or modifying swimming skills. Student may repeat if required by regulation. Field trips are not required. (A-F or P/NP) Lab. 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 which may involve specialized adapted equipment appropriate to one’s disability or injury. Lab. 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 completions allowed. 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 completions allowed. (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 completions allowed. Lecture/Laboratory. MJC Activities. Transfer: (CSU, UC)

PEA 154—BACK BASICS 1 UNIT
Recommended for Success: Medical verification of physical or learning disability or motor problems. Intended for students with medically verified physical disabilities. Improvement of back health including: structure of healthy spine and musculature, common deviations and back injuries and proper body mechanics. Students participate in flexibility training, Pilates, body mechanics, and a progressive exercise program to build musculature and correct posture. Students learn how to perform daily living activities while maintaining back health. Laboratory. Four completions allowed. MJC Activities. Transfer: (CSU, UC)

PEA 800—ADAPTIVE EXERCISE FOR MATURE ADULTS
Use of adaptive weight room and equipment for body maintenance, strengthening, and conditioning. Designed for students with disability limitations. Unlimited repeats. Lecture/Laboratory.

PEC (Physical Education: Coed Activities)

PEC 102, A—WATER AEROBICS ½, 1 UNIT
Formerly listed as PEW 102
Designed to elevate the heart rate to contribute to cardiovascular fitness; provide increased resistance for strength improvement with virtually no impact; help joints move through their range of motion, promoting flexibility. Lecture/Laboratory. Not offered every semester. 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. Lab. MJC Activities. Transfer: (CSU, UC)

PEC 111—BEGINNING RACQUETBALL 1 UNIT
Fundamentals of racquetball. Participation at local court. Expenses are the responsibility of the student. Materials fee required. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 112—INTERMEDIATE RACQUETBALL 1 UNIT
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 111. Intermediate skills and theory. Basic singles and doubles play. Participation at local court. Expenses are the responsibility of the student. Materials Fee Required. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. 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 120 X,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. Lecture/Lab (A-F or P/NP) MJC Activities. Transfer: (CSU, UC)

PEC 122,X,A—BEGINNING MODERN DANCE ½, 1 UNIT
Also offered as THETR 185
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)
PEC 123X,A—INTERMEDIATE MODERN DANCE  
Also offered as: THETR 165X,A  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 122X,A or THETR 185X,A. 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)

PEC 124X,A—ADVANCED MODERN DANCE  
Also offered as: THETR 187  
Recommended for Success: Before enrolling in this course, students are strongly advised to complete PEC 123X,A or THETR 186X,A or equivalent. 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 125—BEGINNING BALLROOM DANCE  
Formerly listed as PEC 125—Beginning Social Dance  
An introduction to ballroom dancing, including basic steps in some of the most popular Latin and American dance rhythms; may include the waltz, foxtrot, rhumba, swing, samba, cha cha, tango, contemporary hustle, line dancing, square dancing, and polka. Student will learn to identify musical beats and rhythms appropriate for each dance. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 126—JAZZ DANCE  
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  
1½, 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  
1½, 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  
Also offered as: THETR 189  
Fundamental ballet techniques and terminology. Lecture/Laboratory. MJC Activities. Transfer: (CSU, UC)

PEC 134X, A—CONTACT IMPROVISATION  
1½, 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 completions allowed. 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. Field trips are not required. (A-F or P/NP) Lab. 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 Stoneridge Climbing Gym of Modesto. Facility use fee required. Field trips may be required. Four completions allowed. Laboratory. (A-F or P/NP) MJC Activities. Transfer: (CSU, UC)

PEC 140X,A—EXERCISE FOR FITNESS  
1½, 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  
1½, 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  
1½, 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  
1½, 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  
1½, 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 148—YOGA FOR BETTER HEALTH  
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. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 150X,A—INTERMEDIATE YOGA FOR BETTER HEALTH  
1½, 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 satisfactorily complete PEC 165 or PEC 166 or PEW 167 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. Intermediate and advanced skills (standing, mat and falling techniques) and strategies to improve judo techniques and enhance competitiveness. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. 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. Lab. MJC Activities. Transfer: (CSU, UC)

PEC 162—AIKIDO 1 BASIC  
1 UNIT  
Recommended for Success: Before enrolling in this course, students are strongly advised to be able to demonstrate physical activity, such as falling down and standing up. Students are also advised to consult a physician if they are pregnant, or have significant health problems. An introduction to the fundamental principles and techniques of Aikido, an ethical Japanese martial art based on non-aggressive, non-resistant, co-creative conflict resolution and internal personal growth by non-competitive means. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 163—AIKIDO 2, INTERMEDIATE  
1 UNIT  
Recommended for Success: Before enrolling in this course, students are strongly advised to demonstrate the Aikido Techniques: Yonkyo, Sumi Otsoshi, Tenchi Nage, Ikkyo, Koteageshi and Irimi Nage or hold Kyo rank from an Aikido Dojo. A continuing exploration of the fundamental principles and techniques of Aikido, an ethical Japanese martial art based on non-aggressive, non-resistant, co-creative conflict resolution and internal personal growth by non-competitive means. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 164—SELF DEFENSE  
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. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

PEC 165—BEGINNING JUDO  
1 UNIT  
Instruction and practice in the basic skills of the sport of Judo including terminology, etiquette, throwing and grappling techniques, with integration of various Kata and Randori. Four completions allowed. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)
PEC 166X,A—INTERMEDIATE JUDO ½, 1 UNIT
Recommended for Success: 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 Kata's (forms) and Randori (free exercise). Four completions allowed. (A-F or P/NP) Lecture/Lab.
MJC Activities. Transfer: (CSU, UC)

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. Lecture/Lab. (A-F or P/NP) 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. A-F or P/NP) 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. Lab. (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, volleying, and proficiency in rules, terminology, and etiquette. Four completions allowed. Lecture/Laboratory. A-F or P/NP) MJC Activities. 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—VOLEYBALL 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 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—PILATES 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, coordination 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) 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. Lab. (P/NP Only). MJC Activities. Transfer: (CSU, UC)

NON-CREDIT COURSES

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, aeroobics, walking/ jogging, and yoga. Four completions allowed. Non-graded. Unlimited repeats. Lecture/Laboratory.
## PEM

### (Physical Education: Men’s Activities)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEM 108X</td>
<td>A — BASEBALL</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
</tr>
<tr>
<td>PEM 111X</td>
<td>A — BASEBALL - TEAM PLAY CONCEPTS</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
</tr>
<tr>
<td>PEM 112X</td>
<td>A — BEGINNING BASKETBALL</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
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<tr>
<td>PEM 113X</td>
<td>A — INTERMEDIATE BASKETBALL</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
</tr>
<tr>
<td>PEM 114X</td>
<td>A — ADVANCED BASKETBALL</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
</tr>
<tr>
<td>PEM 140X</td>
<td>A — TOUCH FOOTBALL AND KANAKI</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
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<tr>
<td>PEM 141X</td>
<td>A — ADVANCED TOUCH FOOTBALL</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
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<tr>
<td>PEM 162X</td>
<td>A — SOCCER</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
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<tr>
<td>PEM 196X</td>
<td>A — ADVANCED WRESTLING</td>
<td>$\frac{1}{2}$, 1 UNIT</td>
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</tbody>
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## PEVM

### (Physical Education: Varsity Men’s Activities)

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, none 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEVM 100</td>
<td>VARSITY BASEBALL</td>
<td>3 UNITS</td>
</tr>
<tr>
<td>PEVM 105</td>
<td>VARSITY BASEBALL (FALL)</td>
<td>3 UNITS</td>
</tr>
</tbody>
</table>
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.

PEW 100—WOMEN'S VARSITY BASKETBALL—FALL 3 UNITS
Instruction, training, and competition in intercollegiate basketball. (Fall semester) Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 101—WOMEN'S VARSITY BASKETBALL—SPRING 1½ UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEW 100.
Continued instruction, training, and competition in intercollegiate basketball. (Spring Semester) Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 103—WOMEN'S VARSITY CROSS COUNTRY 3 UNITS
Instruction, training, and competition in intercollegiate cross country running. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 115—WOMEN'S VARSITY GOLF 3 UNITS
Instruction, practice, and competition in intercollegiate golf. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 120—WOMEN'S VARSITY SOFTBALL 3 UNITS
Instruction, training, and competition in intercollegiate softball. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 123—WOMEN'S VARSITY SOCCER 3 UNITS
Instruction, training, and competition in intercollegiate soccer. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 125—WOMEN'S VARSITY SWIMMING AND DIVING 3 UNITS
Instruction, and intercollegiate competition in swimming and diving. Field trips are not required. Lab. (A-F or P/NP) MJC Activities. Transfer: (CSU, UC)

PEW 130—WOMEN'S VARSITY TENNIS 3 UNITS
Instruction, training, and competition in intercollegiate tennis. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 135—WOMEN'S VARSITY TRACK AND FIELD 3 UNITS
Instruction, training, and competition in intercollegiate track and field events. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 140—WOMEN'S VARSITY VOLLEYBALL 3 UNITS
Instruction, training, and competition in intercollegiate volleyball. Four completions allowed. Field trips are not required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

PEW 145—WOMEN'S VARSITY WATER POLO 3 UNITS
Instruction, training, and competition in intercollegiate water polo. Four completions allowed. Laboratory/Other. (Fall) MJC Activities. Transfer: (CSU, UC)

PEW 166, A—WOMEN'S SELF DEFENSE ½,1 UNIT
A practical course in women's self defense. Practice of various basic techniques and principles of balance, leverage and momentum. Discussion and practical exercises on how to avoid threatening situations in the home or on the street. Open to all female students. Lecture/Laboratory. MJC Activities. Transfer: (CSU, UC)

PEW 167X,A—WOMEN'S BEGINNING JUDO ½,1 UNIT
Instruction and practice in the basic skills of the sport of Judo used for women as self defense. Course will cover terminology, etiquette, throwing and grappling techniques with integration of various Katas (forms), Randori (free exercise) and Japanese jujutsu. Four completions allowed. Lecture/Lab. (A-F or P/NP) 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 are offered through Community Education (209) 575-6063

PHILO (Philosophy)
Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/prospective/programs/bbss/
Instructors: Bill Anelli, Joseph Monast, Stan Spector

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: D)(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

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. Lecture. (A-F or P/NP) Transfer: CSU, UC 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 of existence of God, faith and reason, religious knowledge, language and experience in human life. Lecture. (A-F or P/NP) Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

PHILO 120 — HISTORY OF PHILOSOPHY: ANCIENT 3 UNITS
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 3 UNITS
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 or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

PHILO 123 — TWENTIETH CENTURY PHILOSOPHY 3 UNITS

PHILO 130 — POLITICAL THEORY 3 UNITS
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: (MJC-GE: C)(CSU-GE: C2)(IGETC: 4H)

PHILO 135 — ENVIRONMENTAL ETHICS 3 UNITS
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, economic justice. Theoretical approaches include deep ecology, anthropocentrism, ecofeminism, and pragmatism. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

PHILO 140 — PHILOSOPHY AND FILM 3 UNITS
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) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

PHILO 145 — RELIGIOUS ETHICS 3 UNITS
Prerequisite: Satisfactory completion of ENGL 101
Issues in the ethical and moral dimension of religious life. For both science and non-science majors. Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 3B)

PHILO 150 — THE WAY THINGS WORK 3 UNITS
Basic physical principles underlying common devices such as cameras, electrical systems, home appliances, and automobiles. General understanding of basic scientific and mechanical principles in order to analyze a wide range of other common devices. Field trips are not required. (A-F or P/NP) Lecture. General Education: (MJC-GE: A)

PHILO 161 — SCIENCE MATTERS 3 UNITS
Basic ideas (conceptual and applied) underlying the physical sciences and their role in society. Energy and societal issues. Designed to develop science literacy. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B1)(IGETC: 5A)

PHILO 164 — PHYSICAL SCIENCE ENVIRONMENTAL LAB 1 UNIT
Corequisite: Concurrent enrollment required in or satisfactory completion of PHYS 161. Laboratory and practical experience in the physical sciences. Emphasis on making techniques, data analysis, and the scientific method. Field trips are not required. (A-F or P/NP) Lab. Transfer: (CSU, UC) General Education: (MJC-GE: A)(CSU-GE: B3)(IGETC: 5A)
PHYS 142—MECHANICS, HEAT, & WAVES  
5 UNITS  
Prerequisite: Satisfactory completion of MATH 122.  
Non-calculus introduction to principles and laws of mechanics, thermodynamics and waves. Field trips may be required. (A-F or P/NP) Lecture/Lab/Discussion. 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 STRUCTURES  
5 UNITS  
Prerequisite: Satisfactory completion of PHYS 142.  
Continuation of PHYS 142, including electricity, magnetism, light and atomic structure. Field trips may be required. (A-F or P/NP) Lecture/Lab/Discussion. Transfer: (CSU, UC) (CC PHYS 4B)  
General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A)  

PHYS 160—DESCRIPTIVE INTRODUCTION TO PHYSICS  
3 UNITS  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process.  
A survey course 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. Field trips may be required. (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  
1 UNIT  
Corequisite: Concurrent enrollment required in or satisfactory completion of PHYS 160.  
Laboratory and practical experience in physics. Emphasis on measuring techniques, data analysis, and the scientific method. Field trips may be required. (A-F or P/NP) Lab. Transfer: (CSU, UC)  
General Education: (MJC-GE: A) (CSU-GE: B3)  

PHYS 165—INTRODUCTORY PHYSICS  
5 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete MATH 121 or be eligible for enrollment in MATH 171 as determined by the MJC assessment process.  
Introduction to physics through the study of laboratory measurement in selected topic areas to include mechanics, wave motion, thermodynamics, electricity and magnetism. Develops the theoretical and experimental foundation for PHYS 101 and PHYS 142. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)  
General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A)  

PHYS 180—CONCEPTUAL PHYSICS: A HANDS-ON APPROACH  
4 UNITS  
Prerequisite: Satisfactory completion of MATH 90 or qualification by the MJC assessment process.  
A survey course of selected topics in physical inquiry to include motion, waves, heat, energy, electricity, magnetism and modern physics. Physical theory is explored on a conceptual level with emphasis placed on applying physical principles to everyday phenomena. To include a weekly activity/laboratory session designed to provide students with practical experience in applying physical concepts. Field trips are not required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)  
General Education: (MJC-GE: A) (CSU-GE: B1, B3) (IGETC: 5A)  

PHYSO 101—INTRODUCTORY HUMAN PHYSIOLOGY  
5 UNITS  
Prerequisite: Satisfactory completion of BIO 116 or BIO 111 or BIO 101 and ANAT 125 and CHEM 143.  
Study of body function, organ system integration, communication, and homeostasis at the biochemical, cellular, and system levels. Includes control of osmolarity, protein synthesis and cellular metabolism; cellular communication, neural information processing; blood movement; fluid balance; respiration and digestion; reproduction; sensory perception and control of movement.  
Intended for students entering the health professions. Field trips are not required. (A-F or P/NP) Lecture/Lab/Discussion. Transfer: (CSU, UC) (CC BIOL 60) (MJC ANAT 125 + PHYSO 101) (CSU GE 10+60)  
General Education: (MJC-GE: A) (CSU-GE: B2, B3) (IGETC: 5B)  

PLSC 215—VEGETABLE CROPS  
3 UNITS  
Preparation in plant science including structure, growth processes, propagation, physiology, growth media, biological competitors, and post-harvest factors of food, fiber, and ornamental plants. (A-F or P/NP) Lecture.
PLSC 230—FRUIT SCIENCE 3 UNITS
Elementary culture of fruit and nut crops including growth and fruiting habits, varieties, characteristics and adaptations; environmental factors influencing local fruit production; pruning and training procedures on local fruit crops. Lecture/Laboratory. (A-F Only) Transfer: (CSU, UC) General Education: (MJC-GE-A)

PLSC 235—PLANT PROPAGATION/PRODUCTION 3 UNITS
Also offered as EHS 235
Recommended for Success: Satisfactory completion of PLSC 200 and/or EHS 210.
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. Not offered every semester. (A-F Only) Transfer: (CSU, UC)

PLSC 241—VITICULTURE 3 UNITS
California grape production; study of table and wine grape varieties, uses, adaptations and products, production practices, propagation and planting; training, pruning and irrigation systems; recognition and control of grape pests and diseases. Student is required to design a new vineyard and critique an existing operation. Field trips required. Lecture/Laboratory. 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 nutrition principles in order to understand fertilizers, amendments, their uses, value, application, and relationship to soils and to crops grown in this area. Deficiency symptoms, pH, soil and plant tissue testing, and environmental factors and concerns. Field trips required. Lecture/Laboratory. Transfer: (CSU, UC)

PLSC 255—PLANT PEST CONTROL 3 UNITS
Study of crop insects and insects, their morphology, identification, life cycles, host and habitat relationships, methods and materials of control. Lecture/Laboratory. (A-F Only) Transfer: CSU

PLSC 260—PLANT DISEASE CONTROL 3 UNITS
Study of common local crop diseases; their economic importance, identification, life cycles, host and habitat relationships, and methods of control. Field trips are required. (A-F Only) Lecture/Lab. Transfer: (CSU, UC)

PLSC 267—INTEGRATED PEST MANAGEMENT 1 UNIT
Current topics and discussion on integrated pest management, designed to satisfy Department of Pesticide Regulation requirements for certified pesticide applicator's continuing education. Field trips may be required. Unlimited completions. Lecture. (A-F Only) Transfer: CSU

PLSC 285—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)
POLS C — 140 COMPARATIVE POLITICS 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 101 and satisfactorily complete POLSC 101.
Comparative survey of major totalitarian, authoritarian and democratic systems. Emphasis on Great Britain, France, Germany, Russia, People's Republic of China, Japan and selected Third World countries. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE:B)(CSU-GE:D9)(IGETC:4H)

POLSC 195 — INTERNSHIP IN POLITICAL SCIENCE DISCUSSION 1 UNIT
Formerly listed as POLSC 195 - Internship in Political Science
Corequisite: Concurrent enrollment in POLSC 196.
Examines political internship experiences of students concurrently enrolled in POLSC 196A or 196B or 196C. Class meetings are for sharing learning experiences, analyzing issues related to public service, and collectively addressing issues associated with the internships. Two maximum completions. Field trips are not required. (A-F or P/NP) Discussion. Transfer: CSU

POLSC 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. Two maximum completions. Field trips are not required. (A-F or P/NP) Lab Transfer: CSU

PORTG (Portuguese)
Dean: Patrick Bettencourt
Division Office: Journalism 180
Phone: (209) 575-6149
Division website: www.mjc.edu/current/programs/divdeps/litlang/

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 52 — INTRODUCTION TO PRACTICAL PORTUGUESE 2 3 UNITS
Recommended for Success: PORTG 51.
A continuation of PORTG 51. Designed for those who need it for their work, travel, or to prepare for PORTG 101. Lecture/Laboratory. (Spring)

PSYCH (Psychology)
Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/psychology/programs/psychology/
Instructors: Shelly Fichtenkort, Rebecca Ganes, Bobby Hutchison, Lee Kooler, Teri Nicoll-Johnson

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. (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:4I)

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 UNITS
Prerequisite: Satisfactory completion of PSYCH 101
Also offered as PHYS 103

PSYCH 104 — SOCIAL PSYCHOLOGY 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PSYCH 101 and be familiar with the theories of personality, experimental design, introductory information on diagnostic categories, diagnosis and treatment of mental illnesses.
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 are required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE:B,E)(CSU-GE:E)(IGETC:4I)

PSYCH 105 — ABNORMAL PSYCHOLOGY 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PSYCH 101 and be familiar with the theories of personality, experimental design, introductory information on diagnostic categories, diagnosis and treatment of mental illnesses.
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)(CC PSYCH 5) General Education: (MJC-GE:E)(CSU-GE:E)(IGETC:4I)

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:4I)

PSYCH 111 — PSYCHOLOGY OF GENDER 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PSYCH 101.
A survey of various factors in the development of gender identity and gender roles, including psychological, sociological, biological and cultural influences. Field trips may be required. Lecture. (A-F or P/NP) Transfer: (CSU, UC) General Education: (MJC-GE:B)(CSU-GE:D9)(IGETC:4D, 4I)

PSYCH 118 — PHARMACOLOGY OF ABUSED SUBSTANCES 3 UNITS
Also offered as HUMSR 178
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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 physiological effects of drugs, major neurotransmitter systems and how they are influenced by drugs. Field trips are not required. (A-F or P/NP) Lecture. Transfer: (CSU, UC)

PSYCH 130 — PERSONAL ADJUSTMENT 3 UNITS
Also offered as HUMSR 178
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete HUMSR 116 or PSYCH 101.
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, UC)(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.
### RATV (Radio/Television)

<table>
<thead>
<tr>
<th>COURSES OFFERED</th>
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<tbody>
<tr>
<td><strong>RATV 101—VOICE AND ARTICULATION</strong> 3 UNITS</td>
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<tr>
<td>Formerly listed as Basic Voice and Articulation Also offered as SPCOM 101 and THEIR 101.</td>
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<tr>
<td>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) Lecture. Transfer: (CSU, UC)(CC DRAMA/SPCOM 18)</td>
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| **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/Lab. (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. Lecture/Lab. (A-F or P/NP) Transfer: CSU |

| **RATV 133—ADVANCED RADIO PRODUCTION 2** 4 UNITS |
| Prerequisite: RATV 132 |
| Continuation of RATV 132. Refinement of skills utilizing digital recording and equipment operation. Students will prepare an audition tape for entry level in the job market. Outside speakers from 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 |

| **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 |
| Recommended for Success: RATV 135, 142. |
| 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 ANNOUNCING** 3 UNITS |
| Formerly listed as RATV 137 - Radio and Television Announcing |
| Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50. |
| Performance for the electronic media. Includes announcing, newscasting, interview and narration. Practical development of radio and television announcing skills through practice and evaluation. Field trips might be required. Lecture/Lab /Discussion (A-F or P/NP) Transfer: CSU |

| **RATV 138—WRITING FOR RADIO, TV, & NEW MEDIA** 3 UNITS |
| Formerly listed as RATV 138 - Writing for Radio & TV |
| Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50. |
| 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. Field trips are not required. (A-F Only) Lecture. Transfer: MJC Activities. Transfer: CSU |

| **RATV 141—DOCUMENTARY PRODUCTION** 3 UNITS |
| Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete RATV 134 or satisfactorily complete FILM 150. |
| 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 15 to 20 minute television documentary. Field trips might be required. (A-F Only) Lecture/Lab. MJC Activities. Transfer: CSU |

| **RATV 142—LIGHT, SOUND, CAMERA, & 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. Field trips might be required. (A-F or P/NP) Lecture. 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 THE MEDIA ARTS** 3 UNITS |
| Formerly listed as RATV 150 - Introduction to Mass Communications |
| Exploration of the impact of the mass media on American society and culture within a global and historical perspective. Topics include the origin, development and contemporary structure of the print, electronic and digital media and how they shape the economic, political and social fabric of society; the role of communications media in a democracy; the impact of technology on mass communication; legal and ethical issues; and social issues including gender and cultural diversity. Explores trends in the fields of print and broadcast media and the growing variety of career options. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU |

| **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 maximum completions. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: CSU |
RATV - RLES

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. Satisfactorily complete MUSC 122.
Introduction to the terminology and practices of the recording arts. Properties of sound, microphone placement, multi-track recording, mixing and mastering. Materials Fee Required. Two maximum completions. Field trips might be required. (A-F or P/NP) Lecture/Lab. 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)
Dean: Patrick Bettencourt
Division Office: Journalism 180
Phone: (209) 575-6149
Division website: www.mjc.edu/current/programs/divdeps/litlang/
Instructors: Christopher Briggs, Dorothy Scully, Janelle Gray, Lawrence Scheg

READ 21 — VOCABULARY DEVELOPMENT 3 UNITS
Course is designed to improve the vocabulary of students who are functioning at the Pre-collegiate level. Field trips are not required. (A-F Only) Lecture.

READ 40 — READING COMPREHENSION 3 UNITS
Provides students the opportunity to improve their reading comprehension of pre-collegiate materials. Field trips are not required. (A-F Only) Lecture.

READ 62 — COLLEGE VOCABULARY 3 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to Complete, or assess above, reading 62.
Development of college-level vocabulary. Use of context clues and structural analysis emphasized. Field trips are not required. (A-F Only) Lecture.

READ 82 — COLLEGE READING — COMPREHENSION 3 UNITS
Recommended for Success: Satisfactory completion of READ 40 or qualification by the MJC assessment process.
Designed to improve student’s comprehension and retention of college level materials. Field trips are not required. (A-F Only) Lecture.

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. Field trips are not required. (A-F Only) Lecture. Transfer: CSU

RLES (Real Estate)
Dean: William Kaiser
Division Office: PE Office Building, Room 105
Phone: (209) 575-6269
Division website: www.mjc.edu/athletics
Instructor: Paul Aiello

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 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.
Prerequisite: Satisfactory completion of RLES 380

RLES 381 — REAL ESTATE PRACTICES 3 UNITS
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.
Prerequisite: Satisfactory completion of RLES 380

RLES 382 — LEGAL ASPECTS OF REAL ESTATE 1 3 UNITS
California real property laws including the principles 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.
Prerequisite: Satisfactory completion of RLES 381

RLES 384 — REAL ESTATE FINANCE 3 UNITS
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.
Prerequisite: Satisfactory completion of RLES 380 or 381

RLES 385 — REAL ESTATE APPRAISAL, RESIDENTIAL 3 UNITS
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.
Prerequisite: Satisfactory completion of RLES 380
RLES 392 — BASIC ESCROW PROCEDURES 3 UNITS
Prerequisite: Satisfactory completion of RLES 380 or 381.
Basic escrow elements and practices. Terms, phrasology, and documents. Preparation of instruc-
tions 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)
Dean: Maurice McKinnon, EdD
Division Office: John Muir Hall, Room 258-W
Phone: (209) 575-6373
Division website: www.mjc.edu/alliedhealth
Instructors: Bonnie Hunt, Philip Labrador

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 follow-
ing: 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
Formerly listed as RSCR 202
Prerequisites: Satisfactory completion of AP 150 or (ANAT 125 and PHYS 101)
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
Formerly listed as RSCR 203
Prerequisites: Satisfactory completion of RSCR 220.
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
Formerly listed as RSCR 205
Concurrent Enrollment: RSCR 220
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. Labora-
tory. 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
Formerly listed as RSCR 206
Prerequisites: Satisfactory completion of RSCR 230.
Concurrent Enrollment: RSCR 224
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 4½ UNITS
Prerequisites: Satisfactory completion of RSCR 222 and 224.
Advanced cardiopulmonary physiology and diagnostics for the second year respiratory care
student. Includes advanced arterial blood gas analysis, indices of oxygenation, chest x-ray interpre-
tation, hemodynamic monitoring, laboratory testing, capnography, and ECG interpretation with an
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

RSCR 242 — CRITICAL CARE PROCEDURES 4½ UNITS
Formerly listed as RSCR 212
Prerequisites: Satisfactory completion of RSCR 222, 224 and MICRO 101.
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

RSCR 244 — NEONATAL-PEDIATRIC RESPIRATORY CARE 2 UNITS
Formerly listed as RSCR 214
Prerequisites: Satisfactory completion of RSCR 240 and 242.
Introduction to respiratory care in the neonatal patient. Topics include fetal and neonatal develop-
ment, 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. (Summer) (A-F Only) Transfer: CSU

RSCR 246 — CURRENT ISSUES IN RESPIRATORY CARE 3 UNITS
Formerly listed as RSCR 215
Prerequisites: Satisfactory completion of RSCR 240 and 242.
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 compre-
henitive review to prepare students for state and national examination. Field trips may be required.
Lecture. (A-F Only) (Fall) Transfer: CSU

RSCR 248 — SELF-DIRECTED STUDY ½ UNIT
Formerly listed as RSCR 218
Prerequisites: Satisfactory completion of RSCR 242.
Preparation for therapist level clinical simulation exam. Students spend ½ 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

RSCR 250 — CLINICAL 3 3½ UNITS
Formerly listed as RSCR 213
Concurrent Enrollment: RSCR 240 and 242.
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

RSCR 251 — NEONATAL AND PEDIATRIC RESPIRATORY CARE CLINICAL PRACTICE 1 ½ UNITS
Formerly listed as RSCR 215
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

RSCR 252 — PHYSICIAN ROUNDS FOR RESPIRATORY CARE 1 ½ UNIT
Formerly listed as RSCR 210
Concurrent Enrollment: RSCR 244 and 246.
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)(Fall) Transfer: CSU

RSCR 253 — NEONATAL AND PEDIATRIC RESPIRATORY CARE CLINICAL PRACTICE 2 ½ UNITS
Formerly listed as RSCR 215
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

RSCR 255 — CLINICAL 4 4½ UNITS
Formerly listed as RSCR 254
Prerequisites: Satisfactory completion of RSCR 244
Concurrent Enrollment: RSCR 246
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. Labora-
tory. Materials fee required (items for malpractice liability insurance. (Fall)(P/NP Only) Transfer: CSU
### RSCR - SOCIO

**RSCR 257—CLINICAL PRECEPTORSHIP**  
2½ UNITS  
Formerly listed as RSCR 256  
Prerequisites: Satisfactory completion of RSCR 244  
Concurrent Enrollment: RSCR 246  
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)  
Transfer: CSU

**SIGN (Sign Language)**

Dean: Patrick Bettencourt  
Division Office: Journalism 180  
Phone: (209) 575-6149  
Division website: www.mjc.edu/prospective/programs/divdeps/litlang/  
Instructors: Barbara Wells

**SIGN 125—ASL: BEGINNING COMMUNICATION WITH THE DEAF**  
3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete ENGL 50.  
Introduction to American Sign Language, designed to provide basic conversational skill in the language used among Deaf people in the United States. This course is equivalent to the first two years of high school ASL. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 6A)

**SIGN 126—ASL: INTERMEDIATE COMMUNICATION WITH THE DEAF**  
3 UNITS  
Prerequisite: Satisfactory completion of SIGN 125.  
Communicating with and interpreting for the Deaf at an intermediate conversational level using American Sign Language. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A)

**SIGN 127—ASL: ADVANCED COMMUNICATION WITH THE DEAF**  
3 UNITS  
Prerequisite: Satisfactory completion of SIGN 126.  
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. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A)

**SM (Sheet Metal)**

Dean (Interim): Pedro Mendez  
Office: John Muir 258W  
Phone: (209) 575-6332  
Division website: www.mjc.edu/prospective/programs/teched/sheetmetal/  
Instructors: Sonny Gumm

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. (A-F or P/NP)

**SM 332—VOCATIONAL SHEET METAL AND INSTALLATION 2**  
3 UNITS  
Formerly listed as SM 32  
Prerequisite: Satisfactory completion of SM 331  
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  
Formerly listed as SM 33  
Prerequisite: Satisfactory completion of SM 332  

**SM 334—VOCATIONAL SHEET METAL AND INSTALLATION 4**  
3 UNITS  
Formerly listed as SM 34  
Prerequisite: Satisfactory completion of SM 333  

**SM 335—VOCATIONAL SHEET METAL AND INSTALLATION 5**  
3 UNITS  
Formerly listed as SM 35  
Prerequisite: Satisfactory completion of SM 334  
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  
Formerly listed as SM 36  
Prerequisite: Satisfactory completion of M 335  
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  
Formerly listed as SM 37  
Prerequisite: Satisfactory completion of SM 336  
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  
Formerly listed as SM 38  
Prerequisite: Satisfactory completion of SM 337  
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)**

Dean: Vacant  
Division Office: Journalism 150  
Phone: (209) 575-6129  
Division website: mj.edu/prospective/programs/bbss/  
Instructors: Richard Sweeney, Sandra Woodside

**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)(IGETC: 4J) General Education: (MJC-GE: B) (CSU-GE: D0) (IGETC: 4J)

**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)(TCSU SOC 120)(CC SOCIO 2) General Education: (MJC-GE: B) (CSU-GE: D0) (IGETC: 4J)

**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)(TCSU SOC 12) General Education: (CSU-GE: D0)(IGETC: 4J)
SOCIO 131 — SOCIOLOGY OF MEDICINE: CULTURAL PERSPECTIVES
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

SOCIO 154 — AFRICAN-AMERICAN CULTURES
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. Transfer: (CSU, UC) General Education: (MJC-GE: B)(CSU-GE: D0, D3)(IGETC: 4J)

SOCIO 156 — MEXICAN CULTURE IN THE UNITED STATES

SOCSC (Social Science)
Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mjc.edu/prospective/programs/bbss/

SOCSC 58 — STUDENT LEADERSHIP DEVELOPMENT
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. General Education: (CC GUIDE 115)

SOCSC 105 — WOMEN'S STUDIES
Recommended for Success: Satisfactory completion of ENGL 101
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: D1)(IGETC: 4J)

SOCSC 109 — INTRODUCTION TO EDUCATION - PRACTICUM IN TUTORING
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 EDUC 12) General Education: (MJC-GE: B)

SOCSC 120A, 120B, 120C — COMPUTER APPLICATIONS IN THE SOCIAL SCIENCES
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
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)
Dean: Patrick Bettencourt
Division Office: Journalism 180
Phone: (209) 575-6149
Division website: www.mjc.edu/current/programs/divdegs/litlang/
Instructors: Laura Manzo, Marcos Contreras, PhD, Marianne Franco, PhD

SPAN 45, A, B, C — PRACTICAL SPANISH FOR THE PROFESSIONS
1/2, 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. Multiple completions not to exceed 9 units in any combination. Lecture.

SPAN 51 — INTRODUCTORY SPANISH 1
3 UNITS
Slow-paced, non-transferable course designed for people who have never studied a foreign language before, especially Spanish. Basic Spanish grammar and pronunciation. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CC SPAN 10A) General Education: (MJC-GE: C)

SPAN 52 — INTRODUCTORY SPANISH 2
3 UNITS
Formerly listed as SPAN 52 - Introduction to Practical Spanish 2
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. 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) Equivalent to the satisfactory completion of two years high school Spanish. Lecture. Transfer: (CC SPAN 1A) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 6A)

SPAN 102 — SPANISH 2
5 UNITS
Prerequisite: Satisfactory completion of SPAN 1A or equivalent introductory course.
Prerequisite: Satisfactory completion of SPAN 51. Emphasis on sentence and complete phrases. 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 (CC SPAN 1B) General Education: (MJC-GE: C)(CSU-GE: C2)(IGETC: 6A)

SPAN 103 — SPANISH 3
5 UNITS
Prerequisite: Satisfactory completion of SPAN 101. 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. Transfer: CSU (CC SPAN 130, CSU SPAN SEQ B)(IGETC: 6A)

COURSES OFFERED
SPAN 104—SPANISH 4  
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. Lecture. Transfer: (CSU, UC) (TCSU SPAN 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 1  
Formerly listed as SPAN 109 - Spanish for Spanish Speakers: Fundamentals 
Recommended for Success: Before enrolling in this course, students are strongly advised to understand and be able to communicate in Spanish with near native fluency, but with some formal academic study in the language.

The first of two courses intended for Native or Heritage Spanish speakers who already speak, read and write in Spanish at varying levels and with some academic study in the language. This course reviews major elements of Spanish grammar and focuses on improving oral and written communication skills. Students expand on their own experiences and explore other Spanish Speaking cultures through the study of selected readings. Equivalent to the satisfactory completion of three years of high school Spanish. Taught in Spanish. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2)

SPAN 110—SPANISH FOR SPANISH SPEAKERS 2  
Prerequisite: Satisfactory completion of SPAN 109.

A continuation of SPAN 109. This course is intended for Spanish-speaking students who seek to further improve their oral and written communication skills in standard Spanish through continued grammar review, vocabulary expansion and composition. Students will analyze and discuss topics about the diverse cultures of the Spanish speaking world through selected readings. Equivalent to the satisfactory completion of three years of high school Spanish. Taught in Spanish. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 6A)

SPAN 112—INTRODUCTION TO CHICANO/A LITERATURE  
Formerly listed as SPAN 112 - Introduction to Chicanio/a Literature 
Prerequisite: Satisfactory completion of SPAN 104 or SPAN 110.

Overview of the historical development and current trends in Chicanio/a literature, taught in Spanish. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B, 6A)

SPAN 173—SURVEY OF LATIN AMERICAN LITERATURE  
Prerequisite: Satisfactory completion of SPAN 104 or SPAN 110.

Introduction to Latin American literature from the Pre-Colombian Period to the present, a literary survey of major works from different literary movements and from various genres such as poetry, short story, essay, drama, and the novel. Taught in Spanish. Field trips may be required. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C2) (IGETC: 3B)

SPCOM 100—FUNDAMENTALS OF PUBLIC SPEAKING  

SPCOM 101—VOICE AND ARTICULATION  
Formerly listed as Basic Voice and Articulation 
Also offered as RATV 101 and THEIR 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) Lecture. Transfer: (CSU, UC)(CC DRAMA/SPCOM 18)

SPCOM 102—INTRODUCTION TO HUMAN COMMUNICATION  
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  
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) General Education: (MJC-GE: D2)(CSU-GE: D7)(IGETC: 46)

SPCOM 104—ARGUMENTATION  
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. (A-F or P/NP) Lecture. Transfer: (CSU, UC)(CC SPCOM 2) (TCSU SPAN 120) General Education: (MJC-GE: D2)(CSU-GE: A3)(IGETC: 1B)

SPCOM 105—FORENSICS DEBATE  
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 are required. Laboratory (A-F or P/NP) MJC Activities. Transfer: CC (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 individu- 
al 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.  
(A-F or P/NP) Lecture. Transfer: CSU (CSU GE-140) 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. (A-F or P/NP) Lecture. Transfer: (CSU, UC) General Education: (MJC-GE-D2)  
(CSU-GE-A3)  

SPCOM 109 — WOMEN IN MANAGEMENT  3 UNITS  
Formerly listed as SPCOM 109 - Communication and Leadership Skills for Women in Management  
Communication and leadership skills for effective business management. Emphasis on the 
women's movement into management positions, effective communication strategies in organiza- 
tions, building teams, supervising employees, interpersonal skills, assertiveness training and 
decision-making skills. (A-F or P/NP) 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) Transfer: (CSU, UC) General Education: (MJC-GE-D2)(CSU-GE-A1)  
(IGETC-D1)  

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 in- 
formative speaking, persuasive speaking, communication analysis, speech to entertain, after dinner 
-speaking, extemporaneous speaking, and impromptu speaking. Field trips are required. Laboratory  
(A-F or P/NP) Four completions allowed. MJC Activities. Transfer: CSU  

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, communica- 
tion of author’s thought, emotion and language; expanded knowledge of literature and literary 
forms. Credit given for either THEIR 120 or SPCOM 120, but not both. Lecture. (A-F or P/NP)  
Transfer: (CSU, UC) General Education: (MJC-GE-D2)(CSU-GE-C1)  

SPCOM 122 — INTRODUCTION TO READERS’ THEATRE  3 UNITS  
Also offered as THEIR 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) General Education: (MJC-GE-C)(CSU-GE-C1)  

SPCOM 123 — STORYTELLING  3 UNITS  
Formerly listed as SPCOM 123 - Storytelling: The Interpretation Of Children's Literature  
Also offered as THEIR 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 apprecia-
tion of literature, as well as critical listening of others sharing literature. Field trips may be required.  
Lecture. (A-F or P/NP) Transfer: CSU General Education: (MJC-GE-C)(CSU-GE-C1)  

SPCOM 124 — ADVANCED READERS’ THEATRE  3 UNITS  
Also offered as THEIR 124  
Recommended for Success: Satisfactory completion of (SPCOM 120 or 122) or (THEIR 120 or 122)  
Continued development of the construction and direction of Readers’ Theatre performances suit-
able 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. (A-F or P/NP) Transfer: (CSU, UC) General Education: (MJC-GE-C)(CSU-GE-C1)  

SPCOM 125 — FORENSICS INTERPRETATION EVENTS  2 UNITS  
Principles of applied speech communication through participation in competitive interpretation of 
literature performances. Students will participate in intercollegiate forensics. Competitive events 
include prose, poetry, drama, duo, and oral interpretation plus readers’ theatre. Four completions 
allowed. Field trips are required. (A-F or P/NP) Laboratory. MJC Activities. Transfer: CSU 

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. (A-F or P/NP) Lecture.  
Transfer: (CSU, UC) (SPCOM 5) General Education: (MJC-GE-D2)(CSU-GE-D3, D7)(IGETC-4C, 4G)  

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  

SPELL (Spelling)  
Dean: Patrick Bettencourt  
Division Ofﬁce: Journalism 180  
Phone: (209) 575-6149  
Division website: www.mjc.edu/current/programs/divdeps/litlang/  

SPELL 31 — BASIC SPELLING AND PHONICS 3 UNITS  
Designed for non-native speakers to improve reading and spelling. Emphasis on sound-symbol relationships in English and phonics rules. Discrimination between words which are similar in either spelling or sound. Field trips are not required. (A-F Only) Lecture.  

SPELL 32 — SPELLING AND PRONUNCIATION 3 UNITS  
Designed to improve spelling and pronunciation skills by introducing and using the phonic patterns of English. Field trips are not required. (A-F Only) Lecture.  

STSK (Study Skills/Counseling)  
Dean (Interim): Dean Tsuruda  
Division Ofﬁce: Morris Memorial Building, Room 103  
Phone: (209) 575-6080  
Division website: www.mjc.edu/prospective/getting_started/advising/index.html  
Instructors: Mary Silva, Theresa Ballance  

STSK 25 — STUDENT SUCCESS STRATEGIES  1 UNIT  
Recommended for Success: Before enrolling in this course, students are strongly advised to 
satisfactorily complete ENGL 50 and satisfactorily complete READ 82.  
Introduction to educational, psychological and social factors necessary for college success. Topics 
include: goal setting, time management, study skills and interpersonal communication. This class does not meet guidance requirements for graduation. 
Field trips are not required. (A-F Only) Lecture /Discussion.  

STSK 78 — COLLEGE STUDY SKILLS  3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfy all of the following:  
satisfactorily complete ENGL 50 and satisfactorily complete READ 82.  
Introduction to educational, psychological and social factors necessary for college success. Topics 
include: goal setting, time management, note-taking, textbook reading, test-taking skills, memo-
ization, 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. Field trips are required. (A-F Only) Lecture. MJC 
Guidance. Transfer: (CC GUIDE 100)
SUPR - THETR

SUPR
(Supervisory Management)

Dean: Vacant
Division Office: Journalism 150
Phone: (209) 575-6129
Division website: mj.edu/prospective/programs/bbss/

SUPR 106—GROUP & ORGANIZATIONAL COMMUNICATION  3 UNITS
Formerly listed as SUPR 106 - Organizational Communication
Also offered as SPCOM 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. (A-F or P/NP) Lecture. Transfer: CSU General Education: (MJC-GE: C2)

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.
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)

Dean: Michael Sundquist
Division Office: Performing and Media Arts Center, Room 205
Phone: (209) 575-6881
Division website: mj.edu/arts
Instructors: Lori Bryhn, Lynette Borrelli, Michael Lynch

THETR 100—INTRODUCTION TO THEATRE ARTS  3 UNITS
Investigation of the process of the collective art of the theatre, the role of the actor, director, playwright, designer, technician and audience. Survey of the origins of the theatre, its development as an art form, and the social, political and cultural implications of this art form at various points in history. Attendance of MJC theatre productions required. Field trips may be required. (A-F or P/NP) Lecture. Transfer: CSU, UC (CC DRAMA 10) General Education: (MJC-GE: C) (CSU-GE: C1, C2)

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) Lecture. 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 REPertoire REHEARSAL AND PERFORMANCE  2 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete THETR 102.
Preparation and presentation of a modern/contemporary dance performance for public viewing. Four completions allowed. Lecture/Lab. (A-F or P/NP) MJC Activities. Transfer: CSU, UC

THETR 120—ORAL READING AND INTERPRETATION  3 UNITS
Also offered as SPCOM 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 (A-F or P/NP) Transfer: CSU, UC (CC DRAMA 22) General Education: (MJC-GE: C) (CSU-GE: C1)

THETR 122—INTRODUCTION TO READER'S 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 presentation of Readers' Theatre material. Lecture. Field trips may be required. MJC Activities. Transfer: CSU, UC (CC DRAMA 22) General Education: (MJC-GE: C)

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. (A-F or P/NP) MJC Activities. Transfer: CSU, UC General Education: (MJC-GE: C) (CSU-GE: C1)

THETR 124—ADVANCED READER'S 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 I  2 UNITS
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete THETR 185 or satisfactorily complete PEC 122.
Introduction to the creative process of composing dance. Compositional components will be explored, crafted, and aesthetically analyzed. The elements of dance and performance qualities will be explored through technical practice, improvisation, and compositional studies. Four Maximum completions. Field trips may be required. (A-F or P/NP) Lecture/Lab. 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. Two maximum completions. Lecture/Laboratory Transfer: CSU General Education: (MJC-GE: C) (CSU-GE: C1, C2)

THETR 156—REHEARSAL AND PERFORMANCE IN COMEDY  2 UNITS
Limitations on Enrollment: Enrollment limited to students who successfully pass audition process.
Participation as actors in a fully supported theatre production. This course focuses on ensemble performance techniques that are essential for a comedic play production. Participation in rehearsals and public performances is required. Four Maximum completions. Field trips may be required. (A-F Only) Lab. MJC Activities. Transfer: CSU, UC

THETR 157—REHEARSAL AND PERFORMANCE IN DRAMA  2 UNITS
Limitations on Enrollment: Enrollment limited to students who successfully pass audition process.
Students participate as actors in a fully supported theatre production. This course focuses on individual and ensemble performance techniques that are essential for a modern dramatic, or tragic play production. Participation in rehearsals and public performances is required. Four Maximum completions. Field trips may be required. (A-F Only) Lab. MJC Activities. Transfer: CSU, UC
THETR—158 REHEARSAL AND PERFORMANCE IN CLASSICAL THEATRE  
Limitations on Enrollment: Enrollment limited to students who successfully pass audition process.
Students participate as actors in a fully supported theatre production. Focuses on individual and ensemble performance techniques that are essential for a classical play production. Participation in rehearsals and public performance is required. Four Maximum completions. Field trips may be required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

THETR—159 REHEARSAL AND PERFORMANCE IN MUSICAL THEATRE  
Limitations on Enrollment: Enrollment limited to students who successfully pass audition process.
Students participate as actors, singers, dancers in a fully supported musical theatre production. This course focuses on individual and ensemble performance techniques that are essential for a musical or opera production. Participation in rehearsals and public performances is required. Four Maximum completions. Field trips may be required. (A-F Only) Lab. MJC Activities. Transfer: (CSU, UC)

THETR—160 FUNDAMENTALS OF ACTING  
Survey of the various elements of the actor’s 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. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: (CSU, UC) (CC DRAMA 42) General Education: (CSU-GE:C1)

THETR—161 INTERMEDIATE ACTING  
Prerequisite: Satisfactory completion of THETR 160. Intensive study of character and play development through reading scripts, group improvisations and analysis of theme, content and character. Scenes from published plays will be rehearsed and performed with a culminating final public performance. Includes preparation of dramatic/comedic material and actor psychology for auditions and scenework. Field trips may be required. (A-F Only) Lecture/Lab. MJC Activities. Transfer: (CSU, UC) General Education: (CSU-GE:C1)

THETR 164—IMPROVISATIONAL ACTING  
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). MJC Activities. Transfer: (CSU, UC) General Education: (CSU-GE:C1)(CSU-GE:C1)(DGEC:3A)

THETR 165—HISTORY OF THE AMERICAN MUSICAL THEATRE  
The art of the American musical theatre: the role of the performer, director, music director, book writer, composer, lyricist, choreographer, producer, designers, and audience. Survey of the origins of musical 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: (MUC-GE:C1)(CSU-GE:C1)(DGEC:3A)

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) Lecture/Lab. Transfer: (CSU, UC)

THETR—175 STAGE COSTUMING  
Principles and practice of theatrical costuming. Emphasis on the steps necessary to design costumes for a theatrical production based on a particular play and its characters. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

THETR—178 INTRODUCTION TO SCENERY DESIGN  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete THETR 100. Introduction to the art and practice of scenery design for the stage. History, functions and process of scene design, choosing color and character, and the importance of lighting. Practical application will include scene painting and model building. Field trips may be required. (A-F or P/NP) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

THETR 182—PRACTICAL STAGE LIGHTING  
3 UNITS  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete 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 lighting of a fully supported play, musical or dance production. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: (CSU, UC)

THETR 183—FUNDAMENTALS OF STAGE MAKE-UP 1  
1 UNIT  
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. Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

THETR 184—FUNDAMENTALS OF STAGE MAKE-UP 2  
1 UNIT  
Prerequisite: Satisfactory completion of THETR 183  
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)

THETR 185X,A—BEGINNING MODERN DANCE  
½, 1 UNIT  
Also offered as PEC 122 185X,A  
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)

THETR 186 X,A—INTERMEDIATE MODERN DANCE  
½, 1 UNIT  
Also offered as PEC 123X, A  
Recommended for Success: Before enrolling in this course, students are strongly advised to satisfactorily complete PEC 122X,A or THETR 185X,A. 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)

THETR 187X,A—ADVANCED MODERN DANCE  
½, 1 UNIT  
Also offered as THETR 124X,A  
Recommended for Success: PEC 123 or THETR 186 or equivalent. 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)

THETR 188—JAZZ DANCE  
1 UNIT  
Also offered as PEC 126  
Technique, principles, terminology and the practice of jazz dance. Correct placement and execution of movement using a variety of styles and approaches within the jazz idiom. Four Maximum completions. Field trips may be required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

THETR 189X,A—BALLET 1  
½, 1 UNIT  
Also offered as PEC 133A  
Fundamental ballet techniques and terminology. Four completions allowed. Lecture/Laboratory. MJC Activities. Transfer: (CSU, UC)

THETR 190A,B—THEATRE PRODUCTION WORKSHOP  
1 - 2 UNITS  
A repeatable, multi-technical, lab-only course focusing on the practical aspect of mounting and running a theatrical production. The class covers the following areas of construction and crew management: scenery, sound, lighting, properties, costumes, stage management, publicity, and house management. Four completions allowed. Field trips are not required. (A-F or P/NP) Lab. MJC Activities. Transfer: (CSU, UC)

THETR 192—REHEARSAL & PERFORMANCE  
2 UNITS  
Recommended for Success: Satisfactory completion of THETR 100  
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 completions allowed. Laboratory. MJC Activities. Transfer: (CSU, UC)
TUTOR (Tutoring)

TUTOR 50 — TUTOR SEMINAR 2 UNITS
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. Lecture/Laboratory. (P/NP Only) Transfer: MJC Activities. Transfer: CSU

TUTOR 810 — TUTOR TRAINING
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.

TUTOR 850 — SUPERVISED TUTORING
Provides for individual learning by students with expressed needs in study strategies, learning modes, and developmental materials. Learning experiences will be under instructional supervision. Repeatable. Field trips are not required. (Non-Graded course) Lab.

NON-CREDIT COURSES

TUTOR 850 — SUPERVISED TUTORING
Provides for individual learning by students with expressed needs in study strategies, learning modes, and developmental materials. Learning experiences will be under instructional supervision. Repeatable. Field trips are not required. (Non-Graded course) Lab.

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.

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 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,D.

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, student 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.

THETR — VOCWE

THETR 194 — INTRODUCTION TO WORLD DANCE 3 UNITS
Also offered as PE 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 mores will be explored. Field trips required. (A-F or P/NP Only) Lecture Transfer: (CSU, UC) General Education: (MJC-GE: C) (CSU-GE: C1) (IGETC: 3A)

THETR — 195 MOVEMENT FOR THE PERFORMING ARTIST 3 UNITS
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. Two maximum completions. Field trips are required. (A-F Only) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

THETR 196 — THEATRE MANAGEMENT 1 UNIT
Recommended for Success: Satisfactory completion of THETR 100
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 completions allowed. Lecture/Laboratory. MJC Activities. Transfer: CSU

THETR 197 — BROADWAY/EUROPE THEATRE TRAVEL 1 UNIT
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 completions allowed. Four completions allowed. Lecture/Laboratory. Participation fees are paid to travel agencies approved by Yosemite Community College District. Cost for each trip varies. (Spring). Transfer: CSU

THETR — 195 MOVEMENT FOR THE PERFORMING ARTIST 3 UNITS
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. Two maximum completions. Field trips are required. (A-F Only) Lecture/Lab. MJC Activities. Transfer: (CSU, UC)

THETR 196 — THEATRE MANAGEMENT 1 UNIT
Recommended for Success: Satisfactory completion of THETR 100
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 completions allowed. Lecture/Laboratory. MJC Activities. Transfer: CSU

THETR 197 — BROADWAY/EUROPE THEATRE TRAVEL 1 UNIT
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 completions allowed. Lecture/Laboratory. Participation fees are paid to travel agencies approved by Yosemite Community College District. Cost for each trip varies. (Spring). Transfer: CSU

TUTORS FOR THE GENERAL CAMPUS
Lecture/Laboratory. (P/NP Only)
Understanding. Study of issues affecting tutors and students. Intended for students selected as tutors for the general campus. Lecture/Laboratory. Transfer: CSU

MJC Activities. Transfer:

Lecture/Laboratory.

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 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, D.

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, student 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.

TV (Welding)

For Television Production course offerings, please see RATV (Radio/Television)
WELD 200 — ARC & GAS WELDING  3 UNITS
Introduction level course with a lecture/lab format of instruction. Activities and topics include oxyacetylene welding/cutting and shielded metal arc welding processes. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

WELD 204 — GAS METAL ARC WELDING (G.M.A.W) & FLUX CORE ARC WELDING (F.C.A.W)  3 UNITS
Formerly listed as WELD 204 - Gas Metal Arc (MIG) Flux Core Arc (FCAW) Prerequisite: Satisfactory completion of WELD 200. Advanced occupational welding procedures for ferrous and non-ferrous metals, manual and automated oxyfuel cutting, carbon arc gouging. Includes the introduction of qualification testing procedures that meet the American Welding Society’s structural steel code (D1-1) certification. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

WELD 206 — GAS TUNGSTEN ARC WELDING (G.T.A.W.)  3 UNITS
Formerly listed as WELD 206 - Gas Tungsten Arc Welding (TIG) Prerequisite: Satisfactory completion of WELD 200. Advanced occupational course covering welding procedures for ferrous and non-ferrous sheet-metals and purge welding procedures for stainless steel tubing. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

WELD 300 — INTERMEDIATE WELDING  3 UNITS
Prerequisite: Satisfactory completion of WELD 200. Intermediate level course that uses a lecture/lab format of instruction. Activities and topics cover the welding procedures for mild steel plate, manual and automated oxyfuel cutting, and carbon arc gouging. Qualification testing procedures that meet the American Welding Society’s structural code (D1-1) will also be covered. Materials fee required. Field trips may be required. (A-F or P/NP) Lecture/Lab. Transfer: CSU

WELD 325 — DESIGN AND FABRICATION PROCESSES  3 UNITS
Prerequisite: Satisfactory completion of WELD 200. Theory of drawing to include techniques of sketching out ideas through the development of layout of final blueprints. Estimating cost including the selection of appropriate materials and fabrication processes. Projects are required. Field trips may be required. (A-F Only) Lecture/Lab.

WELD 340 — PIPE WELDING  3 UNITS
Prerequisite: Satisfactory completion of WELD 300. This course offers instruction (both lecture and laboratory) in mild steel pipe welding using the SMAW process. Activities and topics will include general pipe fitting, welding procedures, electrodes, applied layout, and fit-up, hangers, equipment, techniques. Practice in the certification procedure for the American Petroleum Institute (API 1104) code will also be covered. Materials fee required. Field trips are required. (A-F or P/NP) Lecture/Lab.

WKFSK 802 — THE ART OF ACTIVE LISTENING  3 UNITS
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 completions allowed.

WKFSK 803 — TROUBLESHOOTING ON THE JOB  3 UNITS
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 completions allowed.

WKFSK 804 — THE ART OF TEAMWORK  3 UNITS
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 completions allowed.

WKFSK 810 — SKILLS FOR SUCCEEDING AT A NEW JOB  3 UNITS
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 completions allowed. Lecture.

WKFSK 820 — APPLIED MATHEMATICS FOR THE WORKPLACE  3 UNITS
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.

WKFSK 821 — LOCATING INFORMATION  3 UNITS
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.

ZOOL 101 — GENERAL ZOOLOGY  4 UNITS
Prerequisite: BIO 101

ZOOL 110 — ANIMAL BIOLOGY  3 UNITS
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: (MUC-GE-A)(CSU-GE: B2, B3)
Painting his way to a new career at MJC... 

Corey thought he wanted to be a firefighter like his father. After graduating from Modesto High in 2005, he spent his first two years at MJC studying fire science and was only one class away from completion when he came to an important realization. His true passion was working on cars—especially body work, customizing and refinishing them. Corey made the agonizing decision to change his major and start over. He knew it meant several more years of hard work. He also knew it was the right choice and he followed his heart.

Cars had caught Corey’s interest at an early age. Long before he was old enough to drive them he was taking cars apart and putting them back together. However, it wasn’t until he was in college that he discovered refinishing cars. He was in the process of rebuilding his girlfriend’s Acura Integra when he decided he also wanted to paint the vehicle himself. It was the one thing he had not yet taught himself to do, so he registered for an auto refinishing class at MJC... and then another.

“It’s pure fun for me. When I take English I arrive five minutes before class. But when I take a refinishing class I show up 45 minutes before class because I just can’t wait to get started.”

The flexible career options are also something about which Corey is enthusiastic. “A really cool thing about painting is that I can take it in a number of directions, including the refinishing business, paint sales, or even paint development.” He is also a fan of the transformational aspect of refinishing cars. “I love seeing something go from ugly to beautiful and knowing I made it happen. It’s exciting to see people’s reactions.”

Corey enjoyed his Automotive Refinishing course with Jan Pinckney, who recently retired, and he’s especially impressed with the teaching methods used by Jeff Beebe in his Auto Body class. “He’s a real hands-on instructor in the lab and he’s always up-to-date on the most recent auto repair methods.” Corey is also pleased to see MJC’s automotive program striving to be “green” by using more environment-friendly, water-based paint.

“You might not think that people who work on cars care about things like going green, but we do.”

Corey earned a certificate in Auto Refinishing last spring and expects to achieve an Associate’s degree in Auto Body and Refinishing in April 2011. His dream is to own a business for auto body and refinishing, and for customizing and building race cars, and he is already making a name for himself in the industry. His work “shaving” the engine bay of a car driven by legendary drag racer Lisa Kubo was featured in the August 2010 Honda Tuning magazine. His complete paint jobs will be featured in upcoming issues. In the August article, the car owner, Chad Barber, called the team that worked on his race car, “the most intelligent and capable people in the business” and said, “only the best hands have touched this car.” Corey is honored to be included in his high praise and to have his name inscribed on a plaque mounted in the engine bay. He has received offers for jobs on cars in Belgium and the Netherlands, which he has had to decline while finishing college.

The award-winning automotive designer Chip Foose is one of Corey’s heroes and he points to Foose’s dedication to detail as the source of his amazing products. Corey himself is a perfectionist with a driving determination to never settle for anything less than his best effort on every project he undertakes. This competitive young man is now in the process of building his own race car, which he hopes to drive in a front wheel drive challenge at Buttonwillow Raceway in January 2011.

When not working on cars, Corey goes bass fishing with friends and spends time with his girlfriend, a student in MJC’s Nursing Program. Does he ever regret the change in majors that cost him extra years of college? No. He’s too excited about his future and the opportunities ahead, now that he’s following his heart.

“My experience at MJC has taught me that when you are thinking about a career path, go with something you love. Painting and working on cars has never seemed like work to me. I do it for fun!”

Corey Shaw
Appendix
<table>
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<th>Name</th>
<th>Date of Appointment</th>
<th>Title/Department</th>
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<td>Adams, Barbara</td>
<td>2005</td>
<td>Speech Communication</td>
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<td>Mathematics</td>
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<td>2009</td>
<td>Nursing</td>
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<td>1991</td>
<td>Library Faculty</td>
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<td>1991</td>
<td>Baseball Coach</td>
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<td>Physical Education Instructor</td>
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<td>Office Administration</td>
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<td>Mathematics</td>
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<td>Philosophy</td>
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<td>1997</td>
<td>Dean, Agriculture, Environmental Sciences</td>
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<td>2005</td>
<td>Women’s Soccer Coach</td>
<td>California State University, Chico</td>
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<td>Physical Education &amp; Health Instructor</td>
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<td>Ornamental Horticulture/Plant Science</td>
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<td>Mathematics</td>
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<td>Anthropology</td>
<td>University of California, Santa Cruz</td>
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<td>Theatre Arts</td>
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<td>1992</td>
<td>Agriculture</td>
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Briggs, Christopher (2005)
Reading
B.A., Johns Hopkins University
M.A., Johns Hopkins University

Brogan, Paul (2001)
Physical Education Coach
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Brown, Darin (2010)
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Brumley, Gail (2005)
Agriculture
A.A., College of the Sequoias
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Brunn, Sandy (2004)
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Bryhni, Lori (2000)
Performing Arts - Dance
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Bucknam, Ines C. (1986)
French
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Buzbee, Shirley (1994)
Medical Assisting
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Caddell, Joseph (2005)
Chemistry
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Psychology/Human Sexuality
B.S., California Polytechnic State University, San Luis Obispo
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Carroll, Iris (2000)
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B.A., Emory University
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Carter, Florine (2001)
Humanities
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Cavazos, Leticia (2000)
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Chapman, David (2001)
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B.A., Sacramento State University
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Christopherson, Michelle A. (1987)
English
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Cipponeri, Charles J. (2000)
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Circle, Shelley (2001)
English
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Clarke, James L. (1985)
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A.A., Mt. Hood Community College
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Coats, Gloria (1993)
Nursing
B.S.N., California State University, Stanislaus
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Collins, Leslie (2009)
Speech
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Conrado, Todd (2005)
Agriculture
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Spanish
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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
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Curl, Sarah J. (1991)
Mathematics
B.S., University of Texas
M.A., University of Texas

Curtis, Teri (1995)
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

David, Elizabeth (2010)
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B.A., San Jose State University
M.A., 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
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
M.A., Chapman University

Duarte, 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

Faris, Jacqueline (2000)
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
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Franco, Marianne (1987)
Spanish
A.A., Cuesta College
B.A., University of California, Santa Cruz
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Ganes, Rebecca L. (1991)
Psychology
B.A., M.A., California State University, Stanislaus

Garcia, Alida (2000)
EOPS Counselor
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Garcia, Marcos C. (1991)
Counselor
A.A., Allan Hancock College
B.A., California State University, Stanislaus
P.S. 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

Giron, Tina (2009)
B.A., Chapman University
M.A., California State University, Stanislaus

Glat, Robert L. (1997)
Culinary Arts
B.S., University of California, Davis

Gopal, Nita (2004)
English
B.A., Mangalore University, India
M.A., San Jose State University

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 University

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

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

Hamilton, Jennifer (2008)
English
B.A., California State University, Stanislaus
M.A., California State University, Long Beach
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Hanlon, Dana (2005)
Counselor
B.A. University of California, Davis
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Hartman, Terry L. (1975)
Art/Design/Computer Graphics
A.A., Pasadena College
B.S., California State University, Long Beach
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

Administration of Justice
CA P.O.S.T. Certified
A.A., Modesto Junior College
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Dairy Science
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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.S., University of Colorado
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Hulsey, Suzanne (2009)
Chemistry
B.S., Adams State College
M.S., Northern Arizona University

Hunt, Bonnie (2009)
A.S., Loma Linda University

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Hurst, RoseLee (1991)
English
A.A., Cosumnes River College
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Hutchison, Bobby L. (1997)
Psychology
B.A., University of California, Santa Barbara
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Ivory, Eric Anthony (1997)
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Jarrett, Elzbieta B. (1992)
Mathematics
M.S., Wroclaw University, Poland
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Jensen, Barbara (1999)
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Ed.D., Temple University

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Keriotis, Dimitri (2000)
English
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Keriotis, Ingrid J. (2001)
English
B.A., The Evergreen State College
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Kerr, Eileen (2008)
History
B.A., California State University, Stanislaus
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M.A., Yale University

Kerr, Susan (2000)
Anthropology
B.S., University of California, Davis
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Psychology
A.A., Modesto Junior College
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Kroll, Margaret "Peggy" (2000)
Director, Title V, Early College
B.A., University of California, Berkeley
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Kropp, Jon (2000)
Industrial Technology
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Accounting, Business
B.S., San Francisco State University
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Labrador, Philip (2007)
Respiratory Care Clinical Director
B.S., A.A.S., A.A.S., Southern Illinois University at Carbondale

Laffranchini, 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 (1993)
Telecommunications
A.A., Pima Community College
B.A., University of Arizona
Vocational experience 18 years

Landes, Melanie
Nursing
A.S., Modesto Junior College

Lanigan, Elizabeth (1996)
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., D.M.A., Arizona State University

Louie, Donna (2005)
Counselor
A.A., San Joaquin Delta College
B.S., M.S., California State University, Sacramento

Louie, Hanna (1999)
Counselor
A.A., San Joaquin Delta College
B.A., California State University, Stanislaus
M.S., California State University, Sacramento

Counselor
A.A., Modesto Junior College
B.A., UC Santa Barbara
M.A., California State University, Sacramento

Lucas, Erynn (2009)
Microbiology, Biology
B.S., Ph.D., University of Arizona

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)
Music
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., M.A., North Dakota State University

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., University of California, Santa Barbara
M.A., University of Illinois

Martin, Harold Curtis (2000)
History
B.A., University of California Berkeley
M.A., ABD, University of California, San Diego

Business
B.A., St. Joseph's College, New York
Graduate Certif. Philosophy/Theology
Gregorian University, Rome, Italy
M.A., Indiana University
M.B.A., California State University, Stanislaus
L.L.M., Golden Gate University
J.D., University of Southern California

McInnes, Elizabeth (2005)
Biology
B.S., University of LaVerne, LaVerne California
M.S., California Polytechnic University, Pomona

McKenzie, Ross John (2001)
Math
B.S., California Polytechnic State University, San Luis Obispo
M.A., University of California, San Diego
McKinnon, Maurice (2007)
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 (1997)
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 (2001)
Director of Technical Education
B.A., California State University, Stanislaus
M.A., George Washington University

Meyer, Heidi (2009)
Math
B.A., Calvin College
M.A., California State University, Stanislaus

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., 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

Monast, Joseph H (2001)
Philosophy
B.A., M.A., Ph.D., Tulane University

Monlux, Michele (2001)
Biology
A.A., Chabot College
B.A., M.A., University of California, Berkeley

Morales, Michael (2001)
Agriculture
A.S., Kings River College
B.S., California State University, Fresno

Motroni, Milan (2001)
Health, Adaptive Physical Education
B.A., University of California, Davis
M.A., University of the Pacific

Mulder, Cheryl (1996)
Health, Physical Education, Coach
B.A., California State University, Stanislaus
M.S., U.S. Sports Academy

Mullins, Charles (2006)
Speech
B.A., M.A., California State University, Fresno

Nanez, Estella (1988)
Counselor
B.A., M.A., San Jose State University
CCC Counselor Credential
CCC Limited Teaching Credential

Netto, Jeffrey A. (1999)
English
Ph.D., University of California, Santa Barbara

Netto, Jenny Tashjian (2001)
English
B.A., B.A., University of California, Santa Barbara
M.A., California State University, Fullerton

History
A.A., Bellevue Community College
B.A., Washington State University
M.A., Ph.D., University of Idaho

Niazmand, Haleh (2005)
Art
B.A., University of South Dakota
M.F.A., University of Arizona, Tucson

Nicoll-Johnson, Teri (1980)
Psychology
A.A., Rio Hondo College
B.A., California State University, Fullerton
M.A., San Diego State University

Nidey, Bronda (2005)
Dental Assisting
A.A., Modesto Junior College
A.S., Colorado Northwestern Comm. College,
B.A., California State University, Stanislaus
R.D.H., Registered Dental Hygienist

Nomof, Thomas (2000)
Physics
B.A., University of California, Berkeley
M.S., San Jose State University

Olson, Kurt (2004)
PE Coach
B.A., University of California, Davis
M.A., National University

One, Optimism (2005)
English
A.A., Modesto Junior College
B.A., University of California, Berkeley
M.A., California State University, Stanislaus

Paull, Laura (1997)
Journalism
B.A., Vassar College
M.A., Stanford University

Payvar, Kamran (1997)
Mathematics
B.S., Teachers Training University
M.S., California State University, Fresno

Peek, Adrienne (2005)
English
B.A., M.A, California State University, Fresno

Peterson, John (1997)
Automotive Technology
Vocational Experience, 18 years

Phillips, Dale (2005)
Computer Science
A.A., Modesto Junior College
B.A., Western Illinois University
M.B.A., University of LaVerne

Pierstorff, Samuel (2000)
English/Creative Writing
A.A., Orange Coast College
B.A., M.F.A., California State University, Long Beach

Pignotti, Angela (2010)
Mathematics
B.A., University of Colorado, Boulder
M.S., University of Colorado, Boulder
M.S., Ph.D., University of California, Santa Cruz
Pollard, Dale (1999)  
Agriculture  
A.S., Modesto Junior College  
B.S., M.S., California Polytechnic University, San Luis Obispo

Prusso, Laurie (2001)  
Child Development  
B.A., M.S., California State University, Hayward

Ramsey, Jill D (1999)  
Nursing  
A.A., Modesto Junior College  
B.S., Psychology, University of California, Davis  
B.S., Nursing, Loyola University of Chicago  
M.S., University of California, San Francisco

Redwing, Chad (2005)  
Humanities  
B.A., Arizona State University  
M.A., University of Chicago

Nursing  
B.S.N., California State University, Stanislaus  
M.S.N., California State University, Dominguez Hills

Rivera-Jara, Eva (2007)  
Counselor  
A.A., Modesto Junior College  
B.A., San Diego State University  
M.A., University of LaVerne

Robinson, Belen (2007)  
Learning Disability Specialist  
B.A., M.S., San Diego State University

Robles, Martha (2002)  
Dean, Matriculation, Admissions and Records  
A.S., Modesto Junior College  
B.A., University of San Francisco,  
M.A., California State University, Stanislaus

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  
B.S., National University of Mexico  
M.S., Carnegie Mellon University  
D.M.A., Eastman School of Music, Rochester, NY

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

Sanders, Brian K. (2009)  
Dean, Science, Mathematics, & Engineering  
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)  
Nursing  
B.S., California State University, Fresno  
M.S., California State University, Sacramento

Schnoor, Amanda (2009)  
Animal Science  
B.S., Oregon State University

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

Shore, Sara (2009)  
English as a Second Language  
B.A., University of California, Berkeley  
M.A., California State University, Sacramento

Short, Kathleen (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  
D.S.M. United States Sports Academy

Silva, Mary (1997)  
Study Skills  
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

Smedshammer, Michael (2000)  
English  
A.A., Santa Rosa Junior College  
B.A., University of California, Berkeley  
M.A., Ph.D. University of New Mexico

Smith, Albert J. (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 (1991)  
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  
Cross Country/Track Coach  
B.A. California State University, Fresno  
M.A. Fresno Pacific University
Sola, John (2003)
Fire Science
A.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

Stovall, Theresa (2009)
English
B.A., Chapman University
M.A., California State University, Stanislaus

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 (2007)
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

Tanaka, Kimberly
Mathematics (2006)
B.A., 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)
Counseling, Dean of Student Services
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 (2000)
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. (1993)
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

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

Westrope, Theron K. (1999)
English
B.A., University of the Pacific
M.A., University of the Pacific
Ph.D., University of Louisiana at Lafayette

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

Wonder, Nancy (2009)
Nursing
B.S., Seattle Pacific University
M.S., University of Phoenix

Wong, B. Linda (1994)
Counselor
Faculty Emeriti

Adams, Shirlee D.
1971-2003
Articulation Officer

Agostini, Susie "Therese"
1992-2010
Dean, Matriculation
Admissions & Records

Ahrens, Donald
1969-2004
Earth Science, Meteorology

Albion, Jack P.
1969-1997
Physical Education Coach

Allen, Kenneth L.
1969-2000
English

Alvarez, Juan
1971-2004
Counseling, Dean of Student Services

Alves, Ronald
1974-2004
Agriculture

Anderson, Richard
1989-2009
Biology

Andrews, Howard
1975-1985
Automotive

Antonio, Ruth M.
1958-1991
English

Ard, Gary L.
1971-2007
Golf Coach
Physical Education Instructor

Ashleigh, Dave
1971-2004
Physical Education, Math

Ashworth, Frank
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

Baxter, Robert L.
1962-1988
Geology

Beattie, Alex D.
1977-2004

Beck, Patricia D.
1978-2004
Dental Assisting

Bedford, Anthony
1971-1999
History

Benker, Patricia D.
1978-2004
Dental Assisting

Berg-Phillips, Barbara
1991-1999
Nursing

Besio, Maxine N.
School Nurse

Blank, C. Arnold
1966-1991
Dean of College Services

Boyd, Dan W.
1969-2004

Boyer, Allen H.
1968-2003
Music

Bracken, Francis "Jack"
1970-2003
Physical Education

Brown, Harold
1953-1985
Business

Buckley, Robert E.
1975-1993
Administration of Justice

Bucknell, Leland C.
1966-1999
Agriculture

Bucknell, Sandra
1972-2001
Family and Consumer Sciences

Burger, Leroy
1969-1985
Work Experience

Burns, Ronald D.
1972-1991
Administration of Justice

Byrne, John E.
1967-1992
Economics, History

Carline, George
1981-2004
Agriculture

Carlson, Irene
1956-1979
Home Economics

Carlton, Hal
1971-1997
Agriculture

Christopher, Eric
1965-2002
English

Clark, Donald
1971-1999
Behavioral & Social Sciences

Clarke, Tobin D.
2006-2011
Dean of Library, Learning Resources & Technology

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

Cooper, Ron
1990-2007
Automotive Technology

Costello, Bonnie
1992-2009
Nursing

Cover, Alan - 2004
Dean, Agriculture & Environmental Sciences

Cripe, Carl
1971-2000
Chemistry

Curl, James C.
1968-2011
Mathematics

Davis, Donald
1974-2000
Business

Daoud, Anita
1975-1990
Nursing

Diers, Andrew V.
1955-1972
Agriculture

Dierks, Andrew V.
1955-1972
Engineering

Draper, Lowell A.
1965-1993
Spanish

Dutton, Ann
1979-1999
Family & Consumer Sciences

Dyer, Patricia
1989-2003
Physical Education

Eagan, Beverly F.
1975-1993
Allied Health

Eckle, Thomas
1974-2001
Dean, Business, Behavioral & Social Sciences

Elam, Robert V.
1969-1998
History, Anthropology

Elems, Stan W.
1962-1992
Zoology, Biology; Senior Curator, Great Valley Museum

Espinola, Frank Jr.
1960-1976
Agriculture

Ewing, Charles
1990-2009
Speech, Communication, Forensics

Fadag, Anna
1979-1999
Family & Consumer Sciences

Fisher, Charles E.
1960-1990
Counselor

Fisher, Pamila
1979-2004
Chancellor, Yosemite Community College District

Fischer, Harry L.
1947-1972
Engineering; Department Chairman

Fischer, Harry L.
1947-1972
Engineering; Department Chairman

Fischer, Harry L.
1947-1972
Engineering; Department Chairman

Fischer, Harry L.
1947-1972
Engineering; Department Chairman

Fischer, Harry L.
1947-1972
Engineering; Department Chairman
<table>
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<tr>
<th>Name</th>
<th>Years</th>
<th>Department/Program</th>
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<td>Hale, Eileen A.</td>
<td>1990-2009</td>
<td>Nursing</td>
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<tr>
<td>Hanna, Jean G.</td>
<td>1958-1984</td>
<td>Business</td>
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<td>Hansen, Lynn M.</td>
<td>1968-2001</td>
<td>Biology</td>
</tr>
<tr>
<td>Havens, Richard A.</td>
<td>1964-1980</td>
<td>Agriculture</td>
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<td>Heinsius, John J.</td>
<td>1979-2004</td>
<td>Business</td>
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<tr>
<td>Henline, Horace</td>
<td>1973-1985</td>
<td>Assistant Dean, Admissions and Records</td>
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<tr>
<td>Hertert, Patricia C.</td>
<td>1961-1979</td>
<td>Instructional Resources Consultant</td>
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<td>Higginbotham, Richard D.</td>
<td>1968-2010</td>
<td>History, Political Science</td>
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<td>Hilsabeck, Robert L.</td>
<td>1968-1993</td>
<td>Auto Body</td>
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<td>Hinchey, Gwendolyn</td>
<td>1966-1988</td>
<td>Nursing</td>
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<td>Hodge, Douglas</td>
<td>1975-1996</td>
<td>Dean, Physical, Recreational and Health Education</td>
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<td>Hodges, Stanley L.</td>
<td>1965-1995</td>
<td>President</td>
</tr>
<tr>
<td>Hoegh, Bob</td>
<td>1961-1990</td>
<td>Physical Education</td>
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<td>Hornberger, Nan</td>
<td>1974-1998</td>
<td>Sociology</td>
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<td>Hsu, Wei</td>
<td>1966-1993</td>
<td>Mathematics</td>
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<td>Hulst, Dorothy C.</td>
<td>1961-1979</td>
<td>Home Economics</td>
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<td>Jensen, Gwendolyn</td>
<td>1966-1985</td>
<td>Music</td>
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<td>Johnson, James L.</td>
<td>1969-2007</td>
<td>Speech</td>
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<td>Johnson, Odessa P.</td>
<td>1970-2001</td>
<td>Dean, Community and Economic Development</td>
</tr>
<tr>
<td>Johnson, Ralph E.</td>
<td>1946-1975</td>
<td>Physical, Recreation, Health Education</td>
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<td>Jones, William A.</td>
<td>1971-2003</td>
<td>Business</td>
</tr>
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<td>Juergenson, Yancey</td>
<td>1977-2004</td>
<td>Agriculture</td>
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<td>Juette, Helen</td>
<td>1966-1985</td>
<td>Nursing</td>
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<td>Karnopp, Anna</td>
<td>1980-1992</td>
<td>Nursing</td>
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<td>Keach, Robert M.</td>
<td>1991-2007</td>
<td>Dental Assisting</td>
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<td>Kelly, J. Russell</td>
<td>1968-2001</td>
<td>English</td>
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<td>Kerr, Robert T.</td>
<td>1970-1994</td>
<td>Behavioral and Social Sciences, Division Dean</td>
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<td>Kidd, Marsha</td>
<td>1979-2000</td>
<td>Health and PE Coach</td>
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<td>Kline, Roberta</td>
<td>1988-2004</td>
<td>Child Development</td>
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<td>Knies, Donald</td>
<td>1976-1991</td>
<td>Counselor</td>
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<td>Kreger, Gerald</td>
<td>1965-1992</td>
<td>Reading</td>
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<td>Lab, Walter F.</td>
<td>1965-1987</td>
<td>Art</td>
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<tr>
<td>Lafaille, Leon L.</td>
<td>1948-1980</td>
<td>Physical, Recreation and Health Education</td>
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<td>Lafon, Diana</td>
<td>1959-1978</td>
<td>Home Economics</td>
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<tr>
<td>La Mothe, Harry</td>
<td>1965-1983</td>
<td>Trade and Technical</td>
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<tr>
<td>Lane, Ronald W.</td>
<td>1969-1999</td>
<td>English</td>
</tr>
<tr>
<td>Lavaggi, Nita</td>
<td>1953-1974</td>
<td>Assistant Librarian</td>
</tr>
<tr>
<td>Lawrence, Dorothy J.</td>
<td>1954-1974</td>
<td>Home Economics</td>
</tr>
<tr>
<td>Lea, Ugo P.</td>
<td>1963-1990</td>
<td>Dean of Student Services</td>
</tr>
<tr>
<td>Lenkeit, Don</td>
<td>1972-2004</td>
<td>Anthropology</td>
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<tr>
<td>Lenkeit, Roberta</td>
<td>1976-2004</td>
<td>Anthropology</td>
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<tr>
<td>Lippert, Roy H.</td>
<td>1950-1970</td>
<td>Agriculture</td>
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<td>Lofreri, Roland</td>
<td>1954-1985</td>
<td>Physical Science</td>
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<td>Lomax, Brian</td>
<td>1986-2004</td>
<td>Electronics</td>
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<td>Lowry, Ann</td>
<td>2003-2010</td>
<td>Interior Design</td>
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<td>Loyd, Richard</td>
<td>1966-1996</td>
<td>Physical Education</td>
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<td>Ludlow, Jim</td>
<td>1955-1978</td>
<td>Speech</td>
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<td>Luebke, William R.</td>
<td>1974-2009</td>
<td>Astronomy, Physical Science</td>
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<td>Lundberg, Donald L. V.</td>
<td>1965-1976</td>
<td>Counselor</td>
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<tr>
<td>Lyle, Terry</td>
<td>1983-2007</td>
<td>Program Director, Respiratory Care Program</td>
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<td>Manrique, Julius C.</td>
<td>1973-1997</td>
<td>Assistant Dean, Student Services</td>
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<td>Manzoni, Ronald D.</td>
<td>1968-1996</td>
<td>Vice President of Instruction</td>
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<tr>
<td>Martinez, Desdemona</td>
<td>1989-2007</td>
<td>High Tech Specialist, DSP&amp;S</td>
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<td>Martinez, John</td>
<td>2004-2010</td>
<td>Dean of Special Programs</td>
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<td>Mayhew, Lewis B. Jr.</td>
<td>1973-2004</td>
<td>Counseling</td>
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<td>McAllister, Alice D.</td>
<td>1953-1968</td>
<td>Nursing</td>
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<td>McCallum, William J.</td>
<td>1956-1965</td>
<td>Science; Counselor</td>
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<tr>
<td>McLeod, Wilma J.</td>
<td>1990-2004</td>
<td>Vice President, Student Services</td>
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<td>Nadell, Robert</td>
<td>2005-2011</td>
<td>Vice President of Student Services</td>
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<tr>
<td>Nash, John D.</td>
<td>1965-1993</td>
<td>History</td>
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<td>Neumann, Paul R.</td>
<td>1968-1997</td>
<td>English</td>
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<tr>
<td>Nicewonger, John</td>
<td>1979-2006</td>
<td>Agriculture</td>
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<td>Nicholas, Dorothy F.</td>
<td>1965-1977</td>
<td>Reading and Study Skills</td>
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<td>Nicholson, Coy Lee</td>
<td>1965-1997</td>
<td>English</td>
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<td>Nimphius, Richard F.</td>
<td>1980-2006</td>
<td>Agriculture &amp; Environmental Sciences</td>
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Nylander, Selma
1969-1977
Dental Assisting

O'Boosky, 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

Onorato, Mary Alice
1991-2010
Nursing

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
1966-1989
Dean, Home Economics/Trade & Technical

Parsons, Mark C.
1955-1975
Physical, Recreation, Health Education

Pearson, Alysa K.
1988-1998
Learning Disabilities

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Wilson, E. William  
1980-2005  
Computer Science

Wilson, Marian  
1976-1991  
Nursing

Wiinikka, Peter G.  
1976-2000  
Physics

Wood, Edward D.  
1947-1971,  
Science

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 Intersegmental General Education Transfer Curriculum. See p. .

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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