ACADEMIC AFFAIRS

Our goal is to ensure the best possible learning experience for our students at CMC with the highest standards in teaching, learning and service. Whether your goal is for college transfer, occupational preparation, or courses for lifelong learning – Academic Affairs is here to help make it happen for you. Our comprehensive curriculum and innovative curricula will help prepare you to achieve your educational, employment, and lifelong learning goals.

DEGREE AND CERTIFICATE PROGRAMS

MAJOR	CERTIFICATE OF PROFICIENCY **	CERTIFICATE OF COMPLETION	NON-TRANSFER DEGREE	TRANSFER DEGREE
Administration of Justice		X	*	X
AJ19: Peace Officer Arrest/Firearms	X			
Art				
– Art: General				X
– Art: Three-Dimensional Design				X
– Art: Painting				X
– Art: Drawing				X
Automotive Technology			X	
– Automatic Transmissions	X			
– Automotive Air Conditioning	X			
– Automotive Electrical Systems	X			
– Brake Technology	X			
– Emission Control	X			
– Engine Performance	X			
– Engine Rebuilding	X			
– Standard Transmissions	X			
– Suspension & Alignment	X			
Business				
– Accounting		X		
– Business Administration				X
– General Business			X	
– Economics				X
Communications				
– English				X
– Communications				X
Computer Information Systems		X	X	
– Adobe Applications Specialist Skills	X			
– Adobe Certification Training in Illustrator Skills	X			
– Adobe Certification Training in InDesign Skills	X			
– Adobe Certification Training in Photoshop Skills	X			
– HTML Web Content Developer	X			

MAJOR	CERTIFICATE OF PROFICIENCY **	CERTIFICATE OF COMPLETION	NON-TRANSFER DEGREE	TRANSFER DEGREE
Computer Science		X	X	X
Early Childhood Education Title 22 Associate Teacher	X			
Fire Technology		X	X	
Health Sciences				
– Emergency Medical Technician	X			
– Home Health Aide	X			
– Nursing Assistant	X			
– Registered Nursing			X	
– Vocational Nursing		X	X	
Liberal Arts				
– Arts & Humanities Emphasis				X
– Social & Behavioral Sciences Emphasis				X
– Mathematics & Science Emphasis				X
– IGETC (Intersegmental Gen Ed Transfer Curriculum)		X		
– CSU General Education		X		
Liberal Studies for Elementary School Preparation at CSUSB				X
Mathematics				X
Sciences				
– Environmental Sciences				X
Social Sciences				
– Anthropology				X
– History				X
– Philosophy				X
– Political Science				X
– Psychology				X
– Social Science				X
– Sociology				X
Spanish				X

The AJ areas of emphasis are undergoing revisions. Once the revisions are approved, this information will be publicized. Students with catalog rights prior to Fall 2008 will not be affected by these revisions. These revisions affect new students who entered CMC during Fall 2008.

** Certificates of Proficiency are awarded at the Local level and not at the State level. Therefore, Certificates of Proficiency are not posted to the student's transcript.

REV: 07/09

TWO TYPES OF ASSOCIATE DEGREES

with emphasis on *Occupational/Vocational Preparation*

Students planning to earn an Associate Degree with emphasis on occupational/vocational preparation, and who have no plans to pursue a bachelor's degree, must follow the requirements listed on pages 42-43.

Students must complete the course requirements as specified in the program of study for the declared major or area of emphasis, in addition to the general education courses.

The Occupational/Vocational Degree is not designed to prepare students for university transfer and is identified in this catalog as "Associate Degree with Emphasis on Occupational/Vocational Preparation."

with emphasis on *Preparation to Transfer* to a four-year College or University

Students planning to earn an Associate Degree while preparing to transfer must complete the appropriate transfer general education pattern as well as the course requirements specified in the program of study for the declared major or area of emphasis.

Option 1: Students preparing to transfer to the CSU may follow the general education requirements outlined in the CSU Certification pattern (pages 46-47) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern on pages 44-45. See your faculty advisor or counselor for exceptions.

Option 2: Students preparing to transfer to the UC system follow the IGETC on pages 44-45. See your faculty advisor or counselor for exceptions.

Option 3 (specified high-unit majors or areas of emphasis only): Students in these majors or areas of emphasis must see an advisor for general education requirements and recommended electives.

The transfer preparation degree is identified in this catalog as "Associate Degree with Emphasis on Transfer Preparation."

All Associate Degrees require a minimum of 60 units of college credit toward the major or area of emphasis and a cumulative grade point average (GPA) of 2.0 or better. At least 12 units must be earned at Copper Mountain College. Effective Fall, 2009 students will need a "C" or better in all of the required courses for their major or area of emphasis. This includes "restricted" electives.

PROGRAM AND COURSE DESCRIPTIONS

Organization of Programs

The degree and certificate programs on the following pages are arranged alphabetically by discipline. The programs are listed in summary on page 39.

Alphabetical Organization of Courses

The complete listing of degree and certificate programs are followed by the descriptions of the courses offered by the college. Courses are listed alphabetically by course. For example, BUAC 001 - Accounting I is listed with other course codes beginning with "B".

Prerequisites, Corequisites, and Advisories

Complete course prerequisites, corequisites, advisories and recommended preparations are listed in this catalog below each course description.

Prerequisite requirements must be met before enrollment is permitted; corequisite courses must be enrolled in during the same semester; advisory courses are strongly recommended for success in a particular course but will not prevent a student from taking the course. These requirements are intended to offer students a reasonable chance of success.

Courses taken as prerequisites to other courses must be completed with a grade of "C" or better.

See page 30 for the definition of these terms and for additional information limitations of enrollment. Students should discuss questions regarding course eligibility with their advisors or counselors.

Transferable Courses

Courses transferable to the California State University are indicated by "CSU" and those transferable to the University of California are indicated by "UC" under the course description. CSU and UC designate courses accepted for major preparation and elective credit. See pages 43-49 in this catalog for courses that apply to the general education patterns. Such courses count for the 60 units required for advanced standing transfer to CSU or UC.

Transfer eligibility may vary between institutions, your counselor will advise you of important requirements and keep you apprised of any changes.

Note: As new courses are added or changes are made in current courses, transfer credit may not be applicable until CSU and UC have approved these changes.

See www.assist.org for current information on course transferability.

CMC works with local institutions to guarantee admission such as UC Transfer Admission Guarantee (TAG), CSU Lower Division Transfer Patterns (LDTP), and CSU San Bernardino Dual Admissions program.

Additional transfer information is available on the following websites:

CSU & IGETC — www.csumentor.edu, www.calstate.edu/acadaff/ldtp
UC information — www.ucop.edu/pathways, www.uctransfer.org
Independent colleges — www.aiccumentor.org
Transfer and University major preparation course information — www.assist.org

Students are strongly advised to consult with an advisor or counselor early in their first semester at CMC and every semester thereafter. They will help to ensure that you remain on track for graduation and transfer. Transfer eligibility may vary between institutions, your counselor will advise you of important requirements and keep you apprised of any changes.

COURSE ABBREVIATIONS

(CATALOG, SCHEDULES & TRANSCRIPTS)

Academic Skills Center ..... ASC
Administration of Justice..... AJ
Criminal Justice (In Progress)..... CJ
American Sign Language ..... ASL
Anthropology ..... ANTH
Art ..... ART
Astronomy..... A
Automotive Technology ..... AUTO
Biology ..... BI
Business/Accounting ..... BUAC
Business/Finance..... BUFI
Business/Management ..... BUMA
Business/Real Estate..... BURE
Business/Supervision and Management ..... BUSM
Child Development (In Progress) ..... CD
Chemistry ..... CH
Computer Information Systems ..... CIS
Computer Science ..... CS
Developmental Education ..... DE
Disabled Students Programs and Services...DSPS
Early Childhood Education ..... ECE
Economics ..... ECON
Electricity ..... ELEC
Electronics..... ETEC
Energy -Solar (In Progress) ..... ENGY
Emergency Medical Technology..... EMT
English/Composition ..... ENG
Fire Technology ..... FIRE
French ..... FR
Geography..... GEOG
Geology ..... G
Health..... HE
Health Sciences..... HS
History..... HIST
Home Economics – Nutrition ..... HEC
Journalism..... J
Mass Communication ..... MC
Mathematics ..... MATH
Music..... MUS
Natural Resources..... NR
Philosophy..... PHIL
Physical Education ..... PE
Physics ..... PH
Political Science..... PS
Psychology ..... PSY
Reading ..... RDG
Registered Nursing ..... N
Sociology ..... SOC
Spanish..... SPAN
Speech ..... SP
Student Development ..... STDV
Theatre Arts ..... TA
Vocational Nursing..... VN
Wind Turbine Technology (In Progress)..... WTT
Work Experience, General..... WEG
Work Experience, Occupational..... WEV

CALIFORNIA ARTICULATION NUMBER SYSTEM (CAN)

The CALIFORNIA ARTICULATION NUMBER (CAN) System is a statewide numbering system independent of course numbers assigned by local colleges. A CAN number signals that participating California colleges and universities have determined that courses offered by other campuses are equivalent in content and scope to courses offered on their own campuses, regardless of their unique titles or local identifying numbers. Thus, if a schedule of classes or catalog lists a course bearing a CAN number, students on one campus can be assured that it will be accepted in lieu of the comparable CAN course noted in the catalog or schedule of classes of another campus. For example, CAN ECON 2 on one campus will be accepted as meeting the requirement of the designated CAN ECON 2 course on other participating community college or university campuses.

The CAN system will continue to be a resource for students interested in CSU and UC transfer. Both university systems are improving existing transfer programs and developing new ones. Students should consult university websites of institutions they wish to attend, as well as the ASSIST site at www.assist.org to learn about current CAN articulation. CMC counselors can assist students to interpret the information.

CAN COURSES	CMC COURSES	CAN COURSES	CMC COURSES	CAN COURSES	CMC COURSES	CAN COURSES	CMC COURSES
CAN AJ 2	AJ-001	CAN DRAM 8	TA-002A	CAN GEOL 4	G-002	CAN PHIL 2	PHIL-006
CAN ANTH 2	ANTH-001	CAN ECON 2	ECON-001	CAN GOVT 2	PS-001	CAN PHIL 4	PHIL-014
CAN ANTH 4	ANTH-002	CAN ECON 4	ECON-002	CAN HIST SEQ B	HIST-017+018	CAN PHIL 6	PHIL-010
CAN BIOL 2	BI-001A	CAN ENGL 2	ENG-003A	CAN HIST SEQ C	HIST-003+004	CAN PHYS SEQ A	PH-002A+002B
CAN BIOL 4	BI-001B	CAN ENGL 4	ENG-001B	CAN JOUR 2	J-003A	CAN PHYS SEQ B	PH-004A+004B
CAN BIOL 6	BI-001C	CAN ENGL 6	ENG-005A	CAN JOUR 4	MC-001	CAN PSY 2	PSY-001
CAN BIOL 10	BI-022	CAN ENGL 8	ENG-011A	CAN MATH 2	MATH-013	CAN SOC 2	SOC-001
CAN BIOL SEQ A	BI-001A+1B+1C	CAN ENGL 10	ENG -011B	CAN MATH 10	MATH-010	CAN SOC 4	SOC-002
CAN BUS 2	BUAC-001	CAN ENGL 14	ENG-010A	CAN MATH 16	MATH-012	CAN SPAN SEQ A	SPAN-001 + 002 or
CAN BUS 4	BUAC-002	CAN ENGL 22	TA-001	CAN MATH 18	MATH-001A		SPAN-001AB + 002AB or
CAN BUS 8	BUMA-020A	CAN ENGL SEQ B	ENG-011A+011B	CAN MATH 20	MATH-001B		SPAN-001 +002AB or
CAN BUS SEQ A	BUAC-001+002	CAN FCS 2	HEC-013	CAN MATH 22	MATH-002A		SPAN-001AB + 002
CAN CHEM 6	CH-003	CAN GEOG 2	GEOG-001+001L	CAN MATH 24	MATH-002C	CAN SPAN SEQ B	SPAN-003 & 004
CAN CHEM SEQ.A	CH-001A+001B	CAN GEOG 4	GEOG-002	CAN MATH 26	MATH-002B	CAN SPCH 4	SP-004
CAN CSCI 2	CS-073	CAN GEOL 2	G-001	CAN MATH SEQ B	MATH-001A+001B	CAN SPCH 8	SP-001
						CAN STAT 2	MATH-014

COPPER MOUNTAIN COLLEGE
2008-2009
REQUIREMENTS FOR THE ASSOCIATE DEGREE
With emphasis on Occupational/Vocational Preparation

Students may graduate from Copper Mountain College (CMC) with an Associate of Arts or Associate of Science degree upon meeting the following requirements:

A. Completion of 60 units of lower division semester units with a cumulative grade point average (GPA) of at least 2.0 for all grades earned in lower division courses at all colleges and universities attended. Also, a cumulative GPA of at least 2.0 must have been earned at CMC as well as in the selected major or area of emphasis. At least 12 units must be earned at CMC. Beginning Fall 2009, all of the major or area of emphasis courses must be completed with grades of "C" or better.

B. Occupational Vocational Degree requirements:
1. **18 units from the following General Education pattern plus 2 P.E. units or Personal & Community Health.**
2. **Complete one of the Occupational/Vocational programs listed in the Degree Programs section of the CMC catalog.**
3. **A total of 60 units are required to earn an Associate's Degree from CMC.**

A single course, even though listed in more than one area, can only be used to satisfy ONE general education requirement.

C1-Natural Sciences
Three units minimum selected from the following courses:

A 1	Descriptive Astronomy (3)
A 1L	Descript Astronomy Lab (1)
ANTH 1	Intro to Physical Anthropology (3)
BI 1A	Gen Biology - Principles (5)
BI 1B	Gen Biology - Zoology (5)
BI 1C	Gen Biology - Botany (5)
BI 4	Elements of Biology (3)
BI 4L	Elements of Biology Lab (1)
BI 10	Women's Health (3)
BI 15	General Microbiology (5)
BI 21	Elementary Human Anatomy & Physiology (3)
BI 21L	Elementary Human Anatomy & Physiology Lab (1)
BI 22	Human Anatomy (4)
BI 23	Human Physiology (5)
CH 1A,B	General Chemistry (5) (5)
CH 3	Intro General Chemistry (4)
CH 4	Fundamentals of Chemistry (4)
G 1	Physical Geology (4)
G 2	Historical Geology (4)
G 4	Geology Lab (1)
G 5	Environmental Geology (4)
G 6	Geology of California (3)
G 7	Intro to Geology (3)
G 8	Geology of National Parks and Monuments (3)
G10	The Earth Sciences (4)
GEOG 1	Physical Geography (3)
GEOG 1L	Physical Geography Lab (1)
NR 1	Conservation of Natural Resources (3)
NR 1L	Conservation of Natural Resources Lab (1)
PH 1	Introductory Physics (4)
PH 2A,B	College Physics (4) (4)
PH 4A,B	Engineering Physics (5) (5)

C2-Social & Behavioral Sciences
Three units minimum selected from the following:

AJ 1	Intro to Admin of Justice (3)
ANTH 2	Cultural Anthropology (3)
ANTH 3	Archeology, An Introduction to Prehistory (3)
ECON 1	Princ. of Macroeconomics (3)
ECON 2	Princ. of Microeconomics (3)
ECON 11	International Economic Relations (3)
GEOG 2	Cultural Geography (3)
GEOG 7	Regional Geography (3)
GEOG 10	Geography of California (3)
HE 1	Personal & Comm. Health (3)
HEC 13	General Nutrition (3)
HIST 3,4	History of World Civilization I,II (3) (3)
HIST 17	U.S. History through Reconstruction (3)
HIST 18	U.S. History from Reconstruction to Present (3)
HIST 19	California History (3)
MC 1	Mass Media/Amer. Culture (3)
PHIL 13	Perspectives on Death & Dying (3)
PS 1	Intro to Government (3)
PS 2	Intro to Comparative Governments (3)
PS 4	Intro to International Relations (3)
PSY 1	General Psychology (3)
PSY 3	Developmental Psychology(3)
PSY 10	Marriage & Family: Psychological Aspects (3)
PSY 20	Adolescent Psychology (3)
PSY 23	Psychology of Women (3)
PSY 33	Personal & Social Adjstmt. (3)
SOC 1	Introduction to Sociology (3)
SOC 2	Social Problems (3)
SOC 10	Marriage & Family: Sociological Aspects (3)
SOC 14	Minority Groups in America (3)

C3-Humanities
Three units minimum selected from the following:

ART 2A,B	History of Art (3) (3)
ART 2C	History of Modern Art (3)
ART 2D	History Postmodern Art (3)
ART 3A	Basic Design & Color (3)
ART 10	Introduction to Art (3)
ART 18A	Papermaking (3)
ART 33	History of Photography (3)
ASL 1	Elementary American Sign Language (5)
ASL 1A,B	Elementary American Sign Language (3) (3)
ASL 2	Intermediate American Sign Language (5)
ASL 2A,B	Intermediate American Sign Language (3) (3)
ENG 1B	Comp & Literature (3)
ENG 10A	American Literature I (3)
ENG 10B	American Literature II (3)
ENG 11A,B	Survey of English Literature (3) (3)
ENG 12A	World Literature I (3)
ENG 12B	World Literature II (3)
ENG 14	Shakespeare (3)
ENG 15	The Short Story (3)
ENG 16	Literature of the Desert (3)
ENG 17	Women in Literature (3)
ENG 18	Introduction to Poetry (3)
ENG 21	Intro Latin American/ Chicano Literature (3)
ENG 22	Intro African-American Literature (3)
ENG 25	Introduction to the Novel (3)
ENG 35	Myth and Legend (3)
FR 1, 2	Elementary French (5) (5)
FR 1A,B	Elementary French (3) (3)
FR 2A,B	Elementary French (3) (3)
HIST 3,4	History of World Civilization I,II (3) (3)
HIST 17	U.S. History through Reconstruction (3)

HIST 18	U.S. History from Reconstruction to Present (3)
MUS 5	History of Rock 'n' Roll (3)
MUS 10	Intro to Music (3)
MUS 12	Fundamentals of Music (3)
MUS 14	Music History & Literature (3)
PHIL 6	Intro to Philosophy (3)
PHIL 8	Philosophy Ancient-Renaissance (3)
PHIL 9	Philosophy Renaissance-Present (3)
PHIL 12	Religions of the World (3)
PHIL 13	Perspectives on Death and Dying (3)
PHIL 14	Intro to Ethics (3)
SPAN 1, 2	Elementary Spanish (5) (5)
SPAN 1A,B	Elementary Spanish (3) (3)
SPAN 2A,B	Elementary Spanish (3) (3)
SPAN 3, 4	Intermediate Spanish (4) (4)
SPAN 5, 6	Advanced Spanish (3) (3)
SPAN 8A,B	Spanish Conversation (3) (3)
SPAN 40A,B	Spanish Civilization (3) (3)
TA 1	Introduction to Theatre (3)
TA 2A,B	Acting (3) (3)

C4-Language and Rationality
Six (6) units minimum selected from the following areas, A and B, with a grade of "C" or better:

A. English Composition (3 units minimum) selected from:

ENG 3A	College Composition (3)
ENG 41	Technical and Professional Writing (3)

B. Communication, Mathematics, and Critical Thinking (3 units minimum) selected from:

MATH 40 Intermediate Algebra (4) or higher

C5-Traditions and Cultures
Three (3 units minimum) selected from the following:

AJ 5A	Multicultural Issues & Public Safety (3)
ANTH 1	Intro/Physical Anthropology (3)
ANTH 2	Cultural Anthropology (3)
ART 2A,B	History of Art (3) (3)
ART 10	Introduction to Art (3)
ART 18A	Papermaking (3)
ASL 1	Elementary American Sign Language (5)
ASL 1A,B	Elementary American Sign Language (3) (3)
ASL 2	Intermediate American Sign Language (5)
ASL 2A,B	Intermediate American Sign Language (3) (3)
ECON 11	International Economic Relations (3)
ENG 1B	Composition & Literature (3)
ENG 1C	Critical Thinking & Composition (3)
ENG 10A,B	American Literature I & II (3)(3)
ENG 11A,B	Survey of English Literature (3) (3)
ENG 12A,B	World Literature I & II (3) (3)
ENG 15	The Short Story (3)
ENG 18	Introduction to Poetry (3)
ENG 21	Introduction to Latin American/ Chicano Literature (3)
ENG 22	Introduction to African American Literature (3)
ENG 35	Myth & Legend (3)
GEOG 2	Cultural Geography (3)
HE 1	Personal & Comm. Health (3)
HIST 3	History of World Civilization I (3)
HIST 4	History of World Civilization II (3)
HIST 19	California History (3)
MC 1	Mass Media Amer. Culture (3)
MUS 5	History of Rock 'n' Roll (3)
PHIL 6, 7	Intro to Philosophy (3) (3)
PHIL 12	Religions of the World (3)
PHIL 13	Perspectives on Death & Dying (3)
PHIL 14	Intro to Ethics (3)
PS 4	Intro to International Relations (3)
PSY 1	General Psychology (3)
PSY 10	Marriage and Family: Psychological Aspects (3)
PSY 12	Human Sexuality (3)
PSY 23	Psychology of Women (3)
SOC 1	Introduction to Sociology (3)
SOC 2	Social Problems (3)
SOC 4	Sociological Analysis & Critical Thinking (3)
SOC 10	Marriage & Family: Sociological Aspects (3)
SOC 14	Minority Groups in America (3)
SP 1	Introduction to Human Communication (3)
SP 2	Oral Interpretation of Literature (3)
SP 15	Intercultural Communication (3)

And all Foreign Language courses

The Intent to Graduate form must be filed by October 1st for fall graduation and March 1st for spring and summer graduation.

D. Physical Education Activity Requirement: Two units are required from physical education (PE), or health education (HE). **Note: If HE 1 is used to fulfill section C2 or C5 above, it may not be used to fulfill this requirement.**

E. Reading, Writing and Mathematics competency requirements must be met, as follows:

Reading Competency: All students earning an Associate in Arts or Science Degree must demonstrate a reading proficiency at the collegiate level by passing RDG 51, College Preparatory Reading, with a grade of "C" or better, or the equivalent.

Writing Competency: All students earning an Associate in Arts or Science Degree must demonstrate a writing proficiency at the collegiate level by passing with a grade of "C" or better one of the following courses: ENG 3A, ENG 41, or the equivalent.

Mathematics Competency: All students earning an Associate in Arts or Science Degree, with a non-transfer Occupational Emphasis, must demonstrate a mathematics proficiency at the collegiate level by passing with a grade of "C" or better, Math 40 (Intermediate Algebra) or any college mathematics course determined by the Copper Mountain Community College District to be equivalent to or higher than MATH 40.

Note: Consult the CMC Catalog or a counselor in the Office of Student Services for specific requirements for all Degree or Certificate programs. Please check with your counselor or academic advisor for possible changes in AA/AS degree requirements.

REV: 09.08

COPPER MOUNTAIN COLLEGE
2008 - 2009
IGETC
INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

Completion of all the requirements in the Inter-segmental General Education Transfer Curriculum (IGETC) will permit you to transfer from Copper Mountain College to a campus in either the California State University (CSU) or University of California (UC) without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. Exceptions are at the end of the list in the Supplementary Notes available in Office of Student Services. Completion of IGETC is not a requirement for admission but does fulfill a requirement for graduation at a CSU or UC campus.

The course requirements for all areas must be completed before IGETC can be certified. After final grades are posted, you must request IGETC Certification at the time you request final transcripts to be sent to your chosen transfer campuses. The IGETC must be certified prior to transfer. All courses must be completed with grades of "C" or better. For more information, see a counselor.

Completion of IGETC is not a requirement for transfer to a CSU or UC, nor is it the only way to fulfill the lower-division, general education requirements of the CSU or UC prior to transfer. Students may find it advantageous to take courses fulfilling CSU's general education requirements or complete the UC minimum eligibility requirements or the general education requirements of a specific campus.

It is advisable for UC transfer to complete ENG 1B Composition & Literature as a Humanities course.

To obtain an Associates Degree from CMC, at least 12 units (of the required 60 transferable units) must be earned at CMC with a cumulative GPA of at least 2.0 as well as in the selected major or area of emphasis. Beginning Fall 2009, all of the major or area of emphasis courses must be completed with grades of "C" or better. Request an evaluation after completing 30 units toward the degree. The Intent to Graduate form must be filed by October 1st for fall graduation and March 1st for spring and summer graduation.

A single course, even though listed in more than one area, can only be used to satisfy ONE general education requirement.
+Indicates that either the UC or CSU or both may limit transfer credit. Please consult with a counselor for additional information.
***Courses listed in more than one area shall not be certified in more than one area.**

AREA 1
ENGLISH COMMUNICATION
CSU- 3 courses required, one each from Group A, B, and C
UC - 2 courses required, one each from Group A and B

1A-ENGLISH COMPOSITION

ENG 3A	College Composition (3)

1B-CRITICAL THINKING - ENGLISH COMPOSITION

SOC 4	Sociological Analysis and Critical Thinking (3)

1C-ORAL COMMUNICATION
(Required by CSU only)

SP 4	Public Speaking (3)
SP 15	Intercultural Communication (3)

AREA 2
MATHEMATICAL CONCEPTS & QUANTITATIVE REASONING
One Course:

2A-MATH

MATH 1A	Calculus (5)
MATH 1B	Calculus (5)
MATH 10+	College Algebra (4)
MATH 12+	Pre-Calculus (5)
MATH 14+	Statistical Methods (4)
SOC 3+	Fundamentals of Statistics (4)

AREA 3
ARTS and HUMANITIES
At least 3 courses; minimum of one from the Arts and one from the Humanities.

3A-ARTS

ART 2A	History of Art (3)
ART 2B	History of Art (3)
ART 2C	History of Modern Art (3)
ART 2D	History of Postmodern Art (3)
ART 10	Introduction to Art (3)
ART 33	History of Photography (3)
MUS 5	History of Rock 'N' Roll (3)
MUS 10	Introduction to Music (3)
MUS 12	Fundamentals of Music (3)
MUS 14	Music History and Literature (3)

3B-HUMANITIES

ASL 2*	Intermediate Sign Language (5)
ASL 2A*	Intermediate American Sign Language (3)
ASL 2B*	Intermediate American Sign Language (3)
ENG 1B	Composition & Literature (3)
ENG 10A	American Literature I (3)
ENG 10B	American Literature II (3)
ENG 11A	Survey of English Literature to 18th Century (3)
ENG 11B	Survey of English Literature (Romantic-Modern) (3)
ENG 12A	World Literature I (3)
ENG 12B	World Literature II (3)
ENG 14	Shakespeare (3)
ENG 15	The Short Story (3)
ENG 16	Literature of the Desert (3)
ENG 17	Women in Literature (3)
ENG 18	Introduction to Poetry (3)
ENG 21	Introduction to Latin American/ Chicano Literature (3)
ENG 22	Introduction to African-American Literature (3)
ENG 25	Introduction to the Novel (3)
ENG 35	Myth & Legend (3)
FR 2*	Elementary French (5)
FR 2A*	Elementary French (3)
FR 2B*	Elementary French (3)
HIST 3*	History of World Civilization I (3)
HIST 4*	History of World Civilization II (3)
HIST 17*	U.S. History through Reconstruction (3)
HIST 18*	U.S. History from Reconstruction to Present (3)
PHIL 6	Introduction to Philosophy (3)
PHIL 8	Philosophy Ancient-Renaissance (3)
PHIL 9	Philosophy Renaissance to Present (3)
PHIL 12*	Religions of the World (3)
PHIL 13	Perspectives on Death & Dying (3)
PHIL 14	Introduction to Ethics (3)
SPAN 2+*	Elementary Spanish (5)
SPAN 2A+*	Elementary Spanish (3)
SPAN 2B+*	Elementary Spanish (3)
SPAN 3*	Intermediate Spanish (4)
SPAN 4*	Intermediate Spanish (4)
SPAN 5*	Advanced Spanish (3)
SPAN 6*	Advanced Spanish (3)
SPAN 40A	Spanish Civilization (3)
SPAN 40B	Spanish Civilization (3)
TA 1	Introduction to Theater (3)

AREA 4
SOCIAL & BEHAVIORAL SCIENCES

At least 3 courses from at least two disciplines.

4A-ANTHROPOLOGY & ARCHEOLOGY

ANTH 2	Cultural Anthropology (3)
ANTH 3	Archeology, Introduction to Prehistory (3)

4B-ECONOMICS

ECON 1	Principles of Macroeconomics (3)
ECON 2	Principles of Microeconomics (3)
ECON 11	International Economics Relations (3)

4E-GEOGRAPHY

GEOG 2	Cultural Geography (3)
GEOG 7	Regional Geography (3)
GEOG 10	Geography of California (3)

4F-HISTORY

HIST 3*	History of World Civilization I (3)
HIST 4*	History of World Civilization II (3)
HIST 17*	U.S. History through Reconstruction (3)
HIST 18*	U.S .History from Reconstruction to Present (3)
HIST 19	California History (3)

4G-INTERDISCIPLINARY, SOCIAL & BEHAVIORAL SCIENCES

MC 1	Mass Media in American Culture (3)
PHIL 12*	Religions of the World (3)

4H-POLITICAL SCIENCE, GOVERNMENT & LEGAL INSTITUTIONS

PS 1	Introduction to Government (3)
PS 2	Introduction to Comparative Governments (3)
PS 4	Introduction to International Relations (3)

4I-PSYCHOLOGY

PSY 1	General Psychology (3)
PSY 3	Developmental Psychology (3)
PSY 23	Psychology of Women (3)

4J-SOCIOLOGY & CRIMINOLOGY

SOC 1	Introduction to Sociology (3)
SOC 2	Social Problems (3)
SOC 14	Minority Groups in America (3)

AREA 5
PHYSICAL & BIOLOGICAL SCIENCES

At least 2 courses, one Physical Science & one Biological Science course; at least one must include a corresponding laboratory. Courses with 4 or more units include a lab.

5A-PHYSICAL SCIENCES

A 1	Descriptive Astronomy (3)
A 1L	Descriptive Astronomy Lab (1)
CH 1A	General Chemistry (5)
CH 1B	General Chemistry (5)
CH 3+	Introductory General Chemistry (4)
CH 4+	Fundamentals of Chemistry (4)
G 1	Physical Geology (4)
G 4	Geology Laboratory (1)
G 5	Environmental Geology (4)
G 6	Geology of California (3)
G 7+	Introduction to Geology (4)
G 10	The Earth Sciences (4)
GEOG 1	Physical Geography (3)
GEOG 1L	Physical Geography Lab (1)
PH 1+	Introductory Physics (4)
PH 2A+	College Physics (4)
PH 2B+	College Physics (4)
PH 4A+	Engineering Physics (5)
PH 4B+	Engineering Physics (5)

5B-BIOLOGICAL SCIENCES

ANTH 1	Introduction to Physical Anthropology (3)
BI 1A	General Biology – Principles (5)
BI 1B	General Biology – Zoology (5)
BI 1C	General Biology – Botany (5)
BI 4+	Elements of Biology (3)
BI 4L	Elements of Biology Lab (1)
BI 15	General Microbiology (5)
BI 22+	Human Anatomy (4)
NR 1	Conservation of Natural Resources (3)
NR 1L	Conservation of Natural Resources Lab (1)

AREA 6
6A-LANGUAGES OTHER THAN ENGLISH

(UC REQUIREMENT ONLY)

Students must complete 2 years of the same foreign language of high school work with a grade of "C" or better;

OR

Earn a score of 3 or higher on the Foreign Language Advance Placement test, or 550 or higher on the College Board Achievement Test in Foreign Language;

OR

Complete 4-5 units from the following college courses, which meet the proficiency level (courses above the level may also be used to meet this requirement):

ASL 1	Elementary American Sign Language (5)
ASL 1B	Elementary American Sign Language (3)
ASL 2*	Intermediate American Sign Language (5)
ASL 2A*	Intermediate American Sign Language (3)
ASL 2B*	Intermediate American Sign Language (3)
FR 1	Elementary French (5)
FR 1B	Elementary French (3)
FR 2*	Elementary French (5)
FR 2A*	Elementary French (3)
FR 2B*	Elementary French (3)
SPAN 1	Elementary Spanish (5)
SPAN 1B	Elementary Spanish (3)
SPAN 2+*	Elementary Spanish (5)
SPAN 2A+*	Elementary Spanish (3)
SPAN 2B+*	Elementary Spanish (3)
SPAN 3*	Intermediate Spanish (4)
SPAN 4*	Intermediate Spanish (4)
SPAN 5*	Advanced Spanish (3)
SPAN 6*	Advanced Spanish (3)
SPAN 10	Spanish for the Bilingual Student (3)

Foreign Language 1 **or** 1A **and** 1B must be taken to receive IGETC Certification, **maximum credit 5 units**

AREA 7
CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS.

(Not part of IGETC; may be completed prior to transfer.)

6 units, one course from Political Science and one course from History/Economics.

7A-Political Science

PS 1*	Introduction to Government (3)

7B-History/Economics

HIST 17*	U.S. History through Reconstruction (3)
HIST 18*	U.S. History from Reconstruction to Present (3)

AREA 8
PHYSICAL EDUCATION

Although not required for the IGETC curriculum, 2 semester units from Physical Education (PE) or Health Education (HE) are required to earn a degree from CMC.

AREA 9
READING, WRITING & MATHEMATICS COMPETENCIES

are also required for a degree from CMC:

Reading Competency: All students earning an Associate in Arts or Science Degree must demonstrate a reading proficiency at the collegiate level by passing RDG 51, College Preparatory Reading with a grade of "C" or better, or the equivalent.

Writing and Mathematics Competency are satisfied with the math and English requirements for the degree.

COPPER MOUNTAIN COLLEGE
2008 - 2009
GENERAL EDUCATION COURSES

For the ASSOCIATE DEGREE & GENERAL EDUCATION CERTIFICATION

With emphasis on Transfer Preparation to California State University (CSU)

Students must complete *either* the CSU General Education Certification Course Pattern *or* the Intersegmental General Education Transfer Curriculum (IGETC) *and* the major or area of emphasis requirements specified in the program of study for the declared major or area of emphasis. General Education Certification is important because the student is not held to the native CSU General Education Plan (usually more courses). To obtain an associate's degree from CMC, at least 12 units must be earned with a cumulative GPA of 2.0 as well as in the selected major or area of emphasis. Beginning Fall 2009, all the major or area of emphasis courses must be completed with grades of "C" or better. Request a degree evaluation after completing 30 units toward the degree. It is recommended that you file an Intent to Graduate form the semester prior to graduation, October 1st for fall and March 1st for spring and summer. A minimum of 60 transferable units is required to earn an associate's degree at CMC.

CSU GENERAL EDUCATION CERTIFICATION COURSE PATTERN The remaining coursework is upper division and must be completed at the campus granting the Bachelor's degree. *General Education Certification is not automatic* and must be requested by the student when final transcripts are to be sent to the transfer institution. During your last semester at CMC, see a counselor regarding CSU general education certification. Go to the ASSIST Website: www.assist.org for transfer agreements. The Golden 4 courses: Speech, English, Math, and Critical Thinking should be completed as soon as possible with grades of "C" or better.

Note: A single course, even though listed in more than one area, can only be used to satisfy ONE general education requirement.

A- COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING
Nine (9) units minimum; select 1 course from each of the following 3 groups:

A1- Oral Communication ("C" or better requirement)

SP 1 Introduction to Human Communication(3)
SP 4 Public Speaking (3)
SP 5 Group Discussion and Leadership (3)
SP 15 Intercultural Communication (3)

A2- Written Communication ("C" or better requirement)

ENG 1C Critical Thinking & Composition (3)
ENG 3A College Composition (3)

A3- Critical Thinking ("C" or better requirement)

PHIL 10 General Logic (3)
SOC 4 Sociological Analysis and Critical Thinking (3)
SP 7 Decision Making & Advocacy (3)

B- PHYSICAL UNIVERSE & ITS LIFE FORMS
Nine (9) units minimum with at least one course from each of the following groups. One science course must include a corresponding laboratory. Science courses with 4 or more units include a laboratory.

B1 - Physical Science

A 1 Descriptive Astronomy (3)
A 1L Descriptive Astronomy Lab (1)
CH 1A General Chemistry (5)
CH 1B General Chemistry (5)
CH 3 Introductory Gen. Chemistry (4)
CH 4 Fundamentals of Chemistry (4)
CH 5 Bio-Organic Chemistry (4)
G 1 Physical Geology (4)
G 2 Historical Geology (4)
G 4 Geology Lab (1)
G 5 Environmental Geology (4)
G 6 Geology of California (3)
G 7 Introduction to Geology (4)
G 8 Geology of National Parks & Monuments (3)
G 10 The Earth Sciences (4)
GEOG 1 Physical Geography (3)
GEOG 1L Physical Geography Lab (1)
PH 1 Introductory Physics (4)
PH 2A College Physics (4)
PH 2B College Physics (4)
PH 4A Engineering Physics (5)
PH 4B Engineering Physics (5)
PH 4B Engineering Physics (5)

B2 - Life Science

ANTH 1 Intro to Physical Anthropology (3)
BI 1A General Biology - Principles (5)
BI 1B General Biology - Zoology (5)
BI 1C General Biology - Botany (5)
BI 4 Elements of Biology (3)
BI 4L Elements of Biology Lab (1)
BI 15 General Microbiology (5)
B1 21 Elementary Human Anatomy and Physiology (3)
BI 21L Elementary Human Anatomy and Physiology Lab (1)
BI 22 Human Anatomy (4)
BI 23 Human Physiology (5)
NR 1 Conservation of Natural Resources (3)
NR 1L Conservation of Natural Resources Lab (1)

B3 - Laboratory Activity

One course in Area B must include a laboratory (some 3 unit science courses have a separate 1 unit lab).

B4- Mathematics/Quantitative Reasoning ("C" or better requirement)

MATH 1A Calculus (5)
MATH 1B Calculus (5)
MATH 5 Trigonometry (3)
MATH 10 College Algebra (4)
MATH 12 Pre-Calculus (5)
MATH 13 Liberal Arts Mathematics (4)
MATH 14 Statistical Methods (4)
SOC 3 Fundamentals of Statistics (4)

C- ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGE
Nine (9) units minimum; one course must be in the ARTS and one in the HUMANITIES

C1 - ARTS (Art, Dance, Music, Theater)

ART 2A History of Art (3)
ART 2B History of Art (3)
ART 2C History of Modern Art (3)
ART 2D History of Postmodern Art (3)

ART 3A Basic Design and Color (3)
ART 10 Introduction to Art (3)
ART 33 History of Photography (3)
MUS 5 History of Rock 'N' Roll (3)
MUS 10 Introduction to Music (3)
MUS 12 Fundamentals of Music (3)
MUS 14 Music History and Literature (3)
TA 1 Introduction to Theater (3)
TA 2A Acting I (3)
TA 2B Acting I (3)

C2 - Humanities (Literature, Philosophy, Foreign Language)

ASL 1 Elem. American Sign Lang.(5)
ASL 1A Elem. American Sign Lang.(3)
ASL 1B Elem. American Sign Lang. (3)
ASL 2 Inter. American Sign Lang. (5)
ASL 2A Inter. American Sign Lang. (3)
ASL 2B Inter. American Sign Lang. (3)
ENG 1B Composition & Literature (3)
ENG 10A American Literature I (3)
ENG 10B American Literature II (3)
ENG 11A Survey of English Literature: Old English - 18th Century (3)
ENG 11B Survey of English Literature: Romantic - Modern (3)
ENG 12A World Literature I (3)
ENG 12B World Literature II (3)
ENG 14 Shakespeare (3)
ENG 15 The Short Story (3)
ENG 16 Literature of the Desert (3)
ENG 17 Women in Literature (3)
ENG 18 Introduction to Poetry (3)
ENG 21 Introduction to Latin American/ Chicano Literature (3)
ENG 22 Introduction to African-American Literature (3)
ENG 25 Introduction to the Novel (3)
ENG 35 Myth and Legend (3)
FR 1 Elementary French (5)
FR 1A Elementary French (3)
FR 1B Elementary French (3)
FR 2 Elementary French (5)
FR 2A Elementary French (3)
FR 2B Elementary French (3)
HIST 3 History of World Civilization I (3)
HIST 4 History of World Civilization II (3)
HIST 17 U.S. History through Reconstruction (3)
HIST 18 U.S. History from Reconstruction to Present (3)
MUS 10 Introduction to Music (3)
PHIL 6 Introduction to Philosophy (3)
PHIL 8 Philosophy from Ancient Times to Renaissance (3)
PHIL 9 Philosophy from Renaissance to Present (3)
PHIL 12 Religions of the World (3)
PHIL 13 Perspectives on Death & Dying (3)
PHIL 14 Introduction to Ethics (3)
SPAN 1 Elementary Spanish (5)
SPAN 1A Elementary Spanish (3)
SPAN 1B Elementary Spanish (3)
SPAN 2 Elementary Spanish (5)
SPAN 2A Elementary Spanish (3)
SPAN 2A Elementary Spanish (3)
SPAN 2B Elementary Spanish (3)
SPAN 3 Intermediate Spanish (4)
SPAN 4 Intermediate Spanish (4)
SPAN 5 Advanced Spanish (3)
SPAN 6 Advanced Spanish (3)
SPAN 8A Spanish Conversation(3)
SPAN 8B Spanish Conversation(3)
SPAN 10 Spanish for Bilingual Student (3)
SPAN 11 Spanish for Bilingual Student (3)
SPAN 40A Spanish Civilization (3)
SPAN 40B Spanish Civilization (3)

D – SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS AND BEHAVIOR, HISTORICAL BACKGROUND

Nine (9) units minimum, with courses taken in at least two disciplines. Note: The "American Institutions" requirement may be satisfied by taking either HIST 17 or HIST 18, plus PS 1 (Intro to Govt.)

D0- Sociology and Criminology

AJ 1 Introduction to Administration of Justice (3)
SOC 1 Introduction to Sociology (3)
SOC 2 Social Problems (3)
SOC 14 Minority Groups in America (3)

D1 - Anthropology & Archeology

ANTH 2 Cultural Anthropology (3)
ANTH 3 Archaeology, An Introduction to Prehistory (3)

D2 - Economics

ECON 1 Principles of Macroeconomics(3)
ECON 2 Principles of Microeconomics (3)
ECON 11 International Economic Relations (3)

D3 - Ethnic Studies

SOC 14 Minority Groups in America (3)

D4 - Gender Studies

*PSY 10 Marriage and Family: Psychological Aspects (3)
PSY 23 Psychology of Women (3)
*SOC 10 Marriage and Family: Sociological Aspects (3)

D5 - Geography

GEOG 2 Cultural Geography (3)
GEOG 7 Regional Geography (3)
GEOG 10 Geography of California (3)

D6 - History

HIST 3 History of World Civilization I (3)
HIST 4 History of World Civilization II (3)
HIST 17 U.S. History through Reconstruction (3)
HIST 18 U.S. History from Reconstruction to Present (3)
HIST 19 California History (3)

D7 - Interdisciplinary Social or Behavioral Science

MC 1 Mass Media in American Culture (3)
SP 15 Intercultural Communication (3)

D8 - Political Science, Government and Legal Institutions

PS 1 Introduction to Government (3)
PS 2 Intro. to Comparative Governments (3)
PS 4 Intro. to International Relations (3)

D9 - Psychology

PSY 1 General Psychology (3)
PSY 3 Developmental Psychology (3)
PSY 20 Adolescent Psychology (3)
PSY 23 Psychology of Women (3)
PSY 33 Personal and Social Adjustment (3)

E- LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT

Three (3) units minimum: select one:

BI 10 Women's Health (3)
HE 1 Personal and Community Health (3)
HEC 13 General Nutrition (3)
PHIL13 Perspectives on Death & Dying (3)
PSY 3 Developmental Psychology (3)
*PSY 10 Marriage & Family: Psychological Aspects(3)
PSY 12 Human Sexuality (3)
PSY 20 Adolescent Psychology (3)
PSY 23 Psychology of Women (3)
PSY 33 Personal/Social Adjustment (3)
*SOC 10 Marriage & Family: Sociological Aspects (3)

***Students cannot receive credit for PSY 10 if they received credit for Soc 10.**

F- PHYSICAL EDUCATION REQUIREMENT

Although not required for transfer to CSU, two units from Physical Education (PE) or Health Education (HE) are required to earn a degree from CMC.

Note: If HE 1 is used to satisfy Area E, it cannot be used for this requirement.

G- COMPETENCIES IN READING, WRITING, AND MATH

Reading Competencies: All students earning an Associate in Arts or Science Degree must demonstrate a reading proficiency at the collegiate level by passing RDG 51, College Preparatory Reading with a grade of "C" or better, or the equivalent.

Writing and Mathematics Competency are satisfied with the Math and English requirements for the degree.

Important CSU Information– The CSU campuses require 60 transferable units. It is imperative that students complete 60 transferable units for the following reasons: 1. You will have junior status; 2. You will have a better financial package as a junior; 3. You will have priority registration; 4. Sixty (60) transferable units are required to earn a degree from Copper Mountain College. You MUST have a minimum transferable cumulative grade point average (GPA) of 2.0. However, it is better to have a higher GPA to be more competitive. Thirty units of the general education pattern must have grades of "C" or better. Check with the intended CSU campus representative or a CMC counselor regarding acceptance of course work taken immediately before CSU admission.

May 2008

COPPER MOUNTAIN COLLEGE
2009 - 2010
GENERAL EDUCATION COURSES

For the ASSOCIATE DEGREE & GENERAL EDUCATION CERTIFICATION

With emphasis on Transfer Preparation to California State University (CSU)

Students must complete *either* the CSU General Education Certification Course Pattern *or* the Intersegmental General Education Transfer Curriculum (IGETC) *and* the major or area of emphasis requirements specified in the program of study for the declared major or area of emphasis. To obtain an associate's degree from CMC, at least 12 units must be earned at CMC with a cumulative GPA of 2.0 as well as in the selected major or area of emphasis. Beginning Fall 2009, all the major or area of emphasis courses must be completed with grades of "C" or better. Request a degree evaluation after completing 30 units toward the degree. It is recommended that you file an "Intent to Graduate" form the semester prior to graduation, October 1st for fall and March 1st for spring and summer. A minimum of 60 transferable units is required to earn a CMC associate's degree that prepares for university transfer. Completing an associate's degree does not guarantee university acceptance. An application process is required for consideration at a university.

CSU GENERAL EDUCATION CERTIFICATION COURSE PATTERN The remaining coursework is upper division and must be completed at the campus granting the Bachelor's degree. General Education Certification is important because the student is not held to the native CSU General Education Plan (usually more courses). *General Education Certification is not automatic* and must be requested by the student when final transcripts are to be sent to the transfer institution. During your last semester at CMC, see a counselor regarding CSU general education certification. Go to the ASSIST Website: www.assist.org to view transfer agreements. The Golden 4 courses: Speech, English, Math, and Critical Thinking should be completed as soon as possible with grades of "C" or better. Please review the **Important CSU Information** at the bottom of page 2 (on the reverse).

Note: A single course, even though listed in more than one area, can only be used to satisfy ONE general education requirement.

A - ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING
Nine (9) semester units minimum; select 1 course each from A1, A2, and A3:

A1 - Oral Communication ("C" or better requirement)

SP 1 Introduction to Human Communication (3)
SP 4 Public Speaking (3)
SP 5 Group Discussion & Leadership (3)
SP 15 Intercultural Communication (3)

A2 - Written Communication ("C" or better requirement)

ENG 3A College Composition (3)

A3 - Critical Thinking ("C" or better requirement)

PHIL 10 General Logic (3)
SOC 4 Sociological Analysis & Critical Thinking (3)
SP 7 Decision Making & Advocacy (3)

B - SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING
Nine (9) semester units minimum with at least one course from each of the following groups B1, B2, B3, and B4. One science course must include a corresponding laboratory. **Science courses with 4 or more semester units include a laboratory**.

B1 – Physical Science

A 1 Descriptive Astronomy (3)
A 1L Descriptive Astronomy Lab (1)
CH 1A General Chemistry (5)
CH 1B General Chemistry (5)
CH 3 Introductory Gen. Chemistry (4)
CH 4 Fundamentals of Chemistry (4)
CH 5 Bio-Organic Chemistry (4)
G 1 Physical Geology (4)
G 2 Historical Geology (4)
G 4L Geology Lab (1)
G 5 Environmental Geology (4)
G 6 Geology of California (3)
G 7 Introduction to Geology (4)
G 8 Geology of National Parks & Monuments (3)
G 10 The Earth Sciences (4)
GEOG 1 Physical Geography (3)
GEOG 1L Physical Geography Lab (1)
PH 1 Introductory Physics (4)
PH 2A College Physics (4)
PH 2B College Physics (4)
PH 4A Engineering Physics (5)
PH 4B Engineering Physics (5)

B2 – Life Science

ANTH 1 Intro to Phys. Anthropology (3)
BI 1A General Biology - Principles (5)
BI 1B General Biology - Zoology (5)
BI 1C General Biology - Botany (5)
BI 4 Elements of Biology (3)
BI 4L Elements of Biology Lab (1)
BI 15 General Microbiology (5)
BI 21 Elementary Human Anatomy & Physiology (3)
BI 21L Elementary Human Anatomy & Physiology Lab (1)
BI 22 Human Anatomy (4)
BI 23 Human Physiology (5)
NR 1 Conservation of Natural Resources (3)
NR 1L Conservation of Natural Resources Lab (1)

B3 - Laboratory Activity

One course in Area B1 or B2 must include a laboratory (some 3 unit science courses have a separate 1 unit lab).

B4 - Mathematics/Quantitative Reasoning ("C" or better requirement)

MATH 1A Calculus (5)
MATH 1B Calculus (5)
MATH 5 Trigonometry (3)
MATH 10 College Algebra (4)
MATH 12 Pre-Calculus (5)
MATH 13 Liberal Arts Mathematics (4)
MATH 14 Statistical Methods (4)
SOC 3 Fundamentals of Statistics (4)

C - ARTS AND HUMANITIES
Nine (9) semester units minimum; one course must be in the ARTS and one in the HUMANITIES

C1 - ARTS (Art, Dance, Music, Theater)

ART 2A History of Art (3)
ART 2B History of Art (3)
ART 2C History of Modern Art (3)
ART 2D History of Postmodern Art (3)

ART 3A Basic Design and Color (3)
ART 10 Introduction to Art (3)
ART 33 History of Photography (3)
MUS 5 History of Rock 'N' Roll (3)
MUS 10 Introduction to Music (3)
MUS 12 Fundamentals of Music (3)
MUS 14 Music History and Literature (3)
TA 1 Introduction to Theatre (3)
TA 2A Acting I (3)
TA 2B Acting I (3)

C2 - Humanities (Literature, Philosophy, Foreign Language)

ASL 1 Elem. American Sign Lang. (5)
ASL 1A Elem. American Sign Lang. (3)
ASL 1B Elem. American Sign Lang. (3)
ASL 2 Inter. American Sign Lang. (5)
ASL 2A Inter. American Sign Lang. (3)
ASL 2B Inter. American Sign Lang. (3)
ENG 1B Composition & Literature (3)
ENG 10A American Literature I (3)
ENG 10B American Literature II (3)
ENG 11A Survey of English Literature: Old English - 18th Century (3)
ENG 11B Survey of English Literature: Romantic - Modern (3)
ENG 12A World Literature I (3)
ENG 12B World Literature II (3)
ENG 14 Shakespeare (3)
ENG 15 The Short Story (3)
ENG 16 Literature of the Desert (3)
ENG 17 Women in Literature (3)
ENG 18 Introduction to Poetry (3)
ENG 21 Intro to Latin American/Chicano Literature (3)
ENG 22 Introduction to African-American Literature (3)
ENG 25 Introduction to the Novel (3)
ENG 35 Myth and Legend (3)
FR 1 Elementary French (5)
FR 1A Elementary French (3)
FR 1B Elementary French (3)
FR 2 Elementary French (5)
FR 2A Elementary French (3)
FR 2B Elementary French (3)
HIST 3 History of World Civilization I (3)
HIST 4 History of World Civilization II (3)
HIST 17 U.S. History through Reconstruction (3)
HIST 18 U.S. History from Reconstruction to Present (3)
MUS 10 Introduction to Music (3)
PHIL 6 Introduction to Philosophy (3)
PHIL 8 Philosophy from Ancient Times to Renaissance (3)
PHIL 9 Philosophy from Renaissance to Present (3)
PHIL 12 Religions of the World (3)
PHIL 13 Perspectives on Death & Dying (3)
PHIL 14 Introduction to Ethics (3)
SPAN 1 Elementary Spanish (5)
SPAN 1A Elementary Spanish (3)
SPAN 1B Elementary Spanish (3)
SPAN 2 Elementary Spanish (5)
SPAN 2A Elementary Spanish (3)
SPAN 2B Elementary Spanish (3)
SPAN 3 Intermediate Spanish (4)
SPAN 4 Intermediate Spanish (4)
SPAN 5 Advanced Spanish (3
SPAN 6 Advanced Spanish (3)
SPAN 8A Spanish Conversation (3)
SPAN 8B Spanish Conversation (3)
SPAN 10 Spanish for Bilingual Student (3)
SPAN 11 Spanish for Bilingual Student (3)
SPAN 40A Spanish Civilization (3)
SPAN 40B Spanish Civilization (3)

D –SOCIAL SCIENCES

Nine (9) semester units minimum, with courses completed in at least two disciplines. Note: The "American Institutions" requirement may be satisfied by taking either HIST 17 or HIST 18, **AND** PS 1 (Intro to Govt.)

D0 - Sociology and Criminology

AJ 1 Introduction to Administration of Justice (3)
SOC 1 Introduction to Sociology (3)
SOC 2 Social Problems (3)
SOC 14 Minority Groups in America (3)

D1 - Anthropology & Archeology

ANTH 2 Cultural Anthropology (3)
ANTH 3 Archaeology, An Introduction to Prehistory (3)

D2 - Economics

ECON 1 Principles of Macroecon. (3)
ECON 2 Principles of Microecon. (3)
ECON 11 International Economic Relations (3)

D3 - Ethnic Studies

SOC 14 Minority Groups in America (3)

D4 - Gender Studies

*PSY 10 Marriage and Family: Psychological Aspects (3)
PSY 23 Psychology of Women (3)
*SOC 10 Marriage and Family: Sociological Aspects (3)

D5 - Geography

GEOG 2 Cultural Geography (3)
GEOG 7 Regional Geography (3)
GEOG 10 Geography of California (3)

D6 - History

HIST 3 Hist. of World Civilization I (3)
HIST 4 Hist. of World Civilization II (3)
HIST 17 U.S. History through Reconstruction (3)
HIST 18 U.S. History from Reconstruction to Present (3)
HIST 19 California History (3)

D7 - Interdisciplinary Social or Behavioral Science

MC 1 Mass Media in American Culture (3)
SP 15 Intercultural Communication (3)

D8 - Political Science, Government and Legal Institutions

PS 1 Introduction to Government (3)
PS 2 Intro. to Comparative Governments (3)
PS 4 Intro. to International Relations (3)

D9 - Psychology

PSY 1 General Psychology (3)
PSY 3 Developmental Psychology (3)
PSY 20 Adolescent Psychology (3)
PSY 23 Psychology of Women (3)
PSY 33 Personal and Social Adjustment (3)

E - LIFELONG LEARNING AND SELF-DEVELOPMENT

Three (3) semester units minimum

BI 10 Women's Health (3)
HE 1 Personal and Community Health (3)
HEC 13 General Nutrition (3)
PHIL13 Perspectives on Death & Dying (3)
PSY 3 Developmental Psychology (3)
*PSY 10 Marriage & Family: Psychological Aspects(3)
PSY 12 Human Sexuality (3)
PSY 20 Adolescent Psychology (3)
PSY 23 Psychology of Women (3)
PSY 33 Personal/Social Adjustment (3)
*SOC 10 Marriage & Family: Sociological Aspects (3)

***Students cannot receive credit for PSY 10 if they received credit for SOC 10.**

F - PHYSICAL EDUCATION REQUIREMENT

Although not required for transfer to CSU, two units from Physical Education (PE) **or** Health Education (HE) are required to earn a degree from CMC.
Note: If HE 1 is used to satisfy Area E, it cannot be used for this requirement.

G - COMPETENCIES IN READING, WRITING, AND MATH

Reading Competencies: All students earning an Associate in Arts or Science Degree must demonstrate a reading proficiency at the collegiate level by passing RDG 51, College Preparatory Reading with a grade of "C" or better, or the equivalent.

Writing and Mathematics Competency are satisfied with the Math and English requirements for the degree.

Important CSU Information– The CSU campuses require 60 transferable units. It is imperative that students complete 60 transferable units for the following reasons: 1. You will have junior status; 2. You will have a better financial package as a junior; 3. You will have priority registration; 4. Sixty (60) transferable units are required to earn a degree from Copper Mountain College. You MUST have a minimum transferable cumulative grade point average (GPA) of 2.0. However, it is better to have a higher GPA to be more competitive. Thirty units of the general education pattern must have grades of "C" or better. Check with the intended CSU campus representative or a CMC counselor regarding acceptance of course work taken immediately before CSU admission.

DEGREE, CERTIFICATE AND PROGRAMS OF STUDY

ADMINISTRATION OF JUSTICE (AJ)

Students desiring careers in Administration of Justice may elect a program of study designed for upper division transfer, or one which is oriented toward job entry with employment at a local, State, or Federal Law Enforcement Agency.

Students intending to transfer to a four-year college should consult that college for specific requirements, visit the Assist website at www.assist.org, and consult with a CMC counselor. Students planning to pursue a career in Administration of Justice after graduation should include more specialization and emphasis in these courses.

There are certain minimum physical and good moral character requirements for peace officers. Students may obtain more specific information about those requirements from the department staff. Students who are transferring to Copper Mountain College from another college must take at least six (6) units of Administration of Justice courses at Copper Mountain College, in addition to regular required courses to be eligible for graduation.

Certification and approval of the Administration of Justice curriculum has been received from the California State Commission of Peace Officer Standards and Training.

ADMINISTRATION OF JUSTICE
Certificate
and employment preparation

Dept. /No.	Title	Units
Required Courses:		
AJ-001	Intro. to the Administration of Justice	3
AJ-002	Criminal Law	3
AJ-003	Legal Aspects of Evidence	3
AJ-004	Principles/Procedures of the Justice System	3
AJ-005A	Multicultural Issues/Public Safety	3
Required Courses		15
Electives (with advisor approval)		11-13
CERTIFICATE TOTAL		26-28
Advisor:	Munsey	

ADMINISTRATION OF JUSTICE
Associate of Science Degree

Dept. /No.	Title	Units
Required Courses:		
AJ-001	Intro. to the Administration of Justice	3
AJ-002	Criminal Law	3
AJ-003	Legal Aspects of Evidence	3
AJ-004	Principles/Procedures of the Justice System	3
AJ-005A	Multicultural Issues/Public Safety	3
AJ-006	Principles of Investigations	3

Restricted Electives: Choose 6 units from the following
(Administration of Justice (AJ) courses are the preferred electives)

ANTH-002, AJ-007, AJ-008, AJ-009, AJ-010, AJ-016, AJ-022, AJ-024, AJ-030, ASL-001, BUMA-020A, CIS-070A, HIST-018, PHIL-013, PHIL-014, PS-001, PSY-001, PSY-010, PSY-020, PSY-033, SOC-001, SOC-002, SOC-010, SOC-014, SP-004, SP-007, SP-015 or select from any other transferable English (ENG) course above ENG-003A.

Required Courses	18
Restricted Electives	6
CSU or IGETC General Education	34-43
Physical Education Requirement	2-3
DEGREE TOTAL	60-70
Advisor:	Munsey

ART

The Art program of Copper Mountain College offers a variety of courses to allow for individual interest. Students wishing to major in Art should first confer with an advisor to discuss career and possible transfer plans in order that specific requirements can be met. The course offerings at Copper Mountain College coincide with some lower division courses offered at four-year institutions. Students intending to transfer to a four-year college should consult that college for specific requirements, visit the Assist website at www.assist.org, and consult with a CMC counselor. Students planning to transfer to a four-year program are advised to include Three-Dimensional Design in their program of study.

Copper Mountain College offers an Associate of Arts Degree in Art not only for the art major who wishes to pursue a General Art study, but also for students who wish to pursue a specialized Art Program. The following is a list of Art curricula showing the many Art Major Programs offered by Copper Mountain College.

ART
Associate of Arts Degree

Dept. /No.	Title	Units
Required Art Core Curriculum:		
ART-001A	Drawing/Composition	3
ART-003A	Basic Design/Color	3
ART-002A	History of Art	
	or	
ART-002B	History of Art	3
ART-002C	History of Modern Art	3
General Art Major:		
ART-004	Three-Dimensional Design	3
Restricted ART Electives		6
Art Major with Emphasis in Three-Dimensional Design:		
ART-004	Three-Dimensional Design	3
6 units from the following:		
	Ceramics, Ceramic Sculpture and Sculpture	6
Art Major with Emphasis in Painting:		
ART-005	Life Drawing	3
6 units from the following:		
	Painting Courses - ART-021, ART-023 or ART-025	6
Art Major with Emphasis in Drawing:		
2 units from the following:		
	Printmaking Courses - ART-009, ART-013 or ART-014	2
ART-005A + B	Life Drawing	6
All Art Majors:		
Required Courses		20-21
CSU or IGETC General Education		34-43
Transferable Electives (as needed)		4
Physical Education Requirement		2-3
DEGREE TOTAL		60-67
Advisor:	Downer	

AUTOMOTIVE TECHNOLOGY

The automotive curriculum is designed to be as flexible as possible to best serve student needs. Courses required in the occupational areas are so listed because of recommendations of the General Technical Advisory Committee and other individuals' experiences in the specific occupational areas. A student's own background experience may dictate variances in total requirements.

The Automotive certificate programs are in the areas of certification as outlined by the Automotive Standard of Excellence (ASE). Upon completion of a certificate program, the student should be ready for employment in that specialty area and also be prepared to take the ASE Automotive Technology certification test in the same area.

AUTOMOTIVE TECHNOLOGY
Associate of Arts Degree
and employment preparation

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
Units from certificate programs as agreed upon by student and Automotive Advisor		36
Required Courses		40
CMC General Education Requirement		18
Physical Education Requirement		2-3
DEGREE TOTAL		60-61
Advisor:	Freidt	

AUTOMATIC TRANSMISSIONS
Certificate
and preparation for employment as an Automatic Transmission and Transaxle Specialist

Dept./ No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-045	Automatic Transmissions	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

AUTOMOTIVE AIR CONDITIONING
Certificate
and preparation for employment as an Automotive Air Conditioning Specialist

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles (or equivalent)	4
AUTO-060	Automotive Heating and Air Conditioning	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

AUTOMOTIVE TECHNOLOGY - CONTINUED

AUTOMOTIVE ELECTRICAL SYSTEMS

CERTIFICATE

and preparation for employment as an Automotive Electrical Technician

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles (or equivalent)	4
AUTO-020	Auto Electric I	3
AUTO-021	Auto Electric II	4
CERTIFICATE TOTAL		11
Advisor:	Freidt	

BRAKE TECHNOLOGY

CERTIFICATE

and employment preparation

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-036	Automotive Brake Systems	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

EMISSION CONTROL

CERTIFICATE

and preparation for employment as an Automotive Tune-up and Emission Control Systems Technician; preparation for State SMOG License test.

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-020	Automotive Electrical Systems I	3
AUTO-029	Engine Performance II	5
AUTO-027A	B.A.R. Clean Air I	2.5
AUTO-028A	B.A.R. Clean Air II	2.5
CERTIFICATE TOTAL		17
Advisor:	Freidt	

ENGINE PERFORMANCE

CERTIFICATE

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-020	Automotive Electrical Systems I	3
AUTO-018	Engine Performance I	5
AUTO-029	Engine Performance II	5
CERTIFICATE TOTAL		17
Advisor:	Freidt	

ENGINE REBUILDING

CERTIFICATE

and preparation for employment as an Automotive Engine Rebuilding Specialist.

Dept./ No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-044	Automotive Engine Rebuild	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

STANDARD TRANSMISSIONS

CERTIFICATE

and preparation for employment as an Automotive Standard Transmission and Drivetrain Specialist.

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles (or equivalent)	4
AUTO-065	Manual Transmissions and Transaxles	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

SUSPENSION & ALIGNMENT

CERTIFICATE

and preparation for employment as an Automotive Alignment and Suspension Technician.

Dept. /No.	Title	Units
Required Courses:		
AUTO-004	Automotive Principles	4
AUTO-035	Automotive Steering, Suspension and Alignment	5
CERTIFICATE TOTAL		9
Advisor:	Freidt	

BUSINESS

Business courses have been developed for students who wish to: meet occupational qualifications of business and industry, meet lower division requirements for transfer to a four-year college or university to obtain a Bachelor and/or advanced degree in business, or survey the business field to determine personal aptitudes for, and interests in, a business career or as general preparation for dealing with the business community.

Occupational curricula are designed to prepare students, in two years or less, to enter a vocational field and successfully pursue an occupation. Students having such occupational goals should follow suggested curricula listed in this section. Included in the suggested curricula are the core business courses basic to each occupational program. Students should consult their advisors to determine which additional courses are most appropriate to further individual objectives.

BUSINESS ADMINISTRATION
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
BUAC-001	Accounting I	3
BUAC-002	Accounting II	3
BUAC-006	Principles of Managerial Accounting	3
BUMA-020A	Business Law	3
CIS-070A	Computer Applications for Windows	3
ECON-001	Principles of Macroeconomics	3
ECON-002	Principles of Microeconomics	3
Required Courses		21
CSU or IGETC General Education Requirement:		34-43
Physical Education Requirement		2-3
DEGREE TOTAL		60-67
Advisor:	Morrison, Schiel	

ECONOMICS
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
BUAC-001	Accounting I	3
BUAC-002	Accounting II	3
BUMA-020A	Business Law	3
CIS-070A	Computer Business Applications for Windows	3
ECON-001	Principles of Macroeconomics	3
ECON-002	Principles of Microeconomics	3
SOC-003	Fundamentals of Statistics or	
MATH-014	Statistical Methods	4
Required Courses		22
CSU or IGETC General Education Requirement		34-43
Transferable Electives (as needed)		3
Physical Education Requirement		2-3
DEGREE TOTAL		61-68
Advisor:	Morrison, Schiel	

ACCOUNTING
Certificate
and employment preparation.

Dept. No.	Title	Units
Required Courses:		
BUAC-001	Accounting I	3
BUAC-002	Accounting II	3
BUAC-004	Tax Accounting I-Individuals.	3
BUAC-006	Principles of Managerial Accounting	3
BUAC-010	Computer Accounting or	
CIS-010	Computer Accounting	3
CIS-070A	Computer Business Applications for Windows or	
CIS-072D	Excel I	3

Restricted Electives - choose 4 courses from the following:

BUAC -003, BUAC-005, BUFI-001, BUFI-012, BUMA-001, BUMA-010 or BUMA-020A, ECON-001, MATH-014 or SOC-003

Required Courses		17-18
Restricted Electives		12-13
CERTIFICATE TOTAL		30-31
Advisor:	Morrison, Schiel	

GENERAL BUSINESS
Associate of Arts Degree
and employment preparation.

Dept. /No.	Title	Units
Required Courses:		
BUAC-001	Accounting I	3
BUAC-002	Accounting II	3
BUAC-010	Computer Accounting	3
BUMA-001	Principles of Management	3
BUMA-010	Introduction to Business	3
CIS-070A	Computer Business Applications for Windows	3
ECON-001	Principles of Macroeconomics	3
ECON-002	Principles of Microeconomics or	
ECON-011	International Economic Relations	3

Restricted Electives - choose 18 units from the following areas with consent of an advisor:

- Accounting
- Business Law
- Computer Info. Sys.
- Economics
- Real Estate
- Management
- Computer Science
- Marketing
- Finance

Required Courses		24
Restricted Electives		18
CMC General Education Requirement		18
Physical Education Requirement		2-3
DEGREE TOTAL		62-63
Advisor:	Morrison, Schiel	

COMMUNICATIONS

Communications includes degree programs in Communications and English. The Communications Program offers exciting, enriching, and challenging educational opportunities for students in Transfer and Occupational (Non-transfer) programs. Language is vital. The written and spoken word is essential to achieving goals and appreciating a diversity of perspectives, cultures, and languages.

A wide range of courses is offered to help students reach their objectives, including English, communications, journalism, mass communications, reading, and speech.

Foreign Language (French and Spanish) and Humanities are Programs listed separately from Communications.

NOTE: Students applying any of the Communications required courses to their general education package will make up an equivalent number of units by additional study in the major chosen in consultation with an advisor from the Communications Program.

COMMUNICATIONS
Associate of Arts Degree

Dept./ No.	Title	Units
Required Courses:		
ENG-003A	College Composition	3
ENG-001B	Composition and Literature	3
SP-001	Introduction to Human Communication	3
SP-007	Decision Making and Advocacy	3
MC-001	Mass Media in American Culture	3
SP-004	Public Speaking	
	or	
SP-005	Group Discussion/Leadership	
	or	
MC-003	Telecommunications	3
Restricted Electives - choose 1 course from the following:		
ENG-005A/5B	Creative Writing	
ENG-001C	Critical Thinking and Composition	
ENG-0041	Technical and Professional Writing	
J-003A	News Reporting and Writing	3
Required Courses		18
Restricted Electives		3
CSU or IGETC General Education Requirement		34-43
Transferable Electives (as needed)		3
Physical Education Requirement		2-3
DEGREE TOTAL		60-67
Advisor:	Baird, Gilbert and Walker	

ENGLISH
Associate of Arts Degree

Dept./No.	Title	Units
Required Courses:		
ENG-003A	College Composition	3
ENG-001B	Composition and Literature	3
ENG-005A	Creative Writing	3
J-003A	News Reporting and Writing	3
Restricted Electives - choose at least 3 courses from the following:		
ENG-010A, ENG-010B, ENG-011A, ENG-011B, ENG-012A, ENG-12B, ENG-014, ENG-015, ENG-016, ENG-017, ENG-018, ENG-021, ENG-022, ENG-025, ENG-035, SP-004, SP-007 and MC-001		
Required Courses		12
Restricted Electives		9
CSU or IGETC Education Requirement		34-43
Transferable Electives (as needed)		3
Physical Education Requirement		2-3
DEGREE TOTAL		60-67
Advisor:	Baird, Gilbert and Walker	

COMPUTER INFORMATION SYSTEMS

The Computer Information Systems program encompasses a broad area of study which includes basic computer concepts, microcomputer business applications and computer science concepts. This program prepares students for entry-level positions. Software studies include the latest versions of Windows, the Microsoft Office Suite, Internet applications, desktop and Web publishing. Courses are designed to develop basic and advanced computer skills and to develop problem-solving strategies.

COMPUTER INFORMATION SYSTEMS
Associate of Arts Degree
and employment preparation.

Dept./No.	Title	Units
Required Courses:		
CIS- 070A	Computer Business Applications for Windows	3
CIS- 070B	Windows and Internet	3
CIS-076B	Word I	3
CIS-072D	Excel I	3
CS-073	Introduction to Computer Science	3
Emphasis Area - Business Applications:		
CIS-050	Computer Keyboarding I	2
CIS-073C	Access I	3
CIS-078B	Word II	3
CIS-082C	Web Publishing I	3
CS-071D	Excel II	3

Restricted Electives - choose 15 units from the following:

BUMA- 010, BUAC- 010, CIS-010, BUAC- 066, CS-001, CS- 002A, CS-002B, CS-002C, CS-002D, CS-011, CS-012, CS-013, CS-014, CS-080, CS-086, CS-086A, CS-087, CS-088, CS-089, CS-089A, CIS-030, CIS-060, CIS-062, CIS-063, CIS-064, CIS-070C, CIS-080 or CS-071E, CIS-082E, CIS-082F, CIS-082G, CIS-082H, CIS-082I, CIS-083C, CIS-083E, CIS-083F, CIS-083G, CIS-083J, CIS-084A, CIS-084C, CIS-086, CIS-087

Required Courses	15
Emphasis Courses	14
Restricted Electives	15
CMC General Education Requirement	18
Physical Education Requirement	2-3
DEGREE TOTAL	64-65

Note: To ensure an individualized education plan, we strongly urge students to meet with an Academic Advisor before selecting courses from the subject areas listed above. Some course substitutions may be approved.

Advisor: Dutkiewicz

COMPUTER INFORMATION SYSTEMS
Certificate
and employment preparation.

Dept./No.	Title	Units
Required Courses:		
CIS-070A	Computer Business Applications for Windows	3
CIS-070B	Windows and Internet	3
CIS-076B	Word I	3
CIS-072D	Excel I	3
Emphasis Area - Business Applications:		
CIS-050	Computer Keyboarding I	2
CIS-073C	Access I	3
CIS-078B	Word II	3
CIS-082C	Web Publishing I	3
CIS-074	Excel II	
	or	
CS-071D	Excel II	3

Restricted Electives - choose 3 units from the following:

BUMA-010, BUAC-066, CS-001, CS-002A, CS-011, CS-012, CS-013, CS-014, CS-073, CS-086, CIS-030, CIS-060, CIS-062, CIS-063, CIS-070C, CIS-080 or CS-071E, CIS-082E, CIS-082F, CIS-082G, CIS-082H, CIS-082I, CIS-083C, CIS-087

Required Courses	12
Emphasis Courses	14
Restricted Electives	3
CERTIFICATE TOTAL	29

Note: To ensure an individualized educational plan, we strongly urge students to meet with an Academic Advisor before selecting courses from the subject areas listed above. Some course substitutions may be approved.

Advisor: Dutkiewicz

ADOBE CERTIFICATION TRAINING
in Illustrator skills
Certificate

Dept./ No.	Title	Units
Required Courses:		
CIS-082F	Adobe Illustrator for Print and Web Design I	3
CIS-083F	Adobe Illustrator for Print and Web Design II	3
CIS-082I	Introduction to Adobe Acrobat	1.5
CIS-082H	Web-Based Animation with Flash	3

Required Courses	10.5
CERTIFICATE TOTAL	10.5

Advisor: Dutkiewicz

ADOBE CERTIFICATION TRAINING
in InDesign skills
Certificate

Dept./No.	Title	Units
Required Courses:		
CIS-082G	Adobe InDesign I	3
CIS-083G	Adobe InDesign II	3
CIS-082I	Introduction to Adobe Acrobat	1.5

Required Courses	7.5
CERTIFICATE TOTAL	7.5

Advisor: Dutkiewicz

COMPUTER INFORMATION SYSTEMS - CONTINUED

ADOBE CERTIFICATION TRAINING IN PHOTOSHOP SKILLS CERTIFICATE

Dept./No.	Title	Units
Required Courses:		
CIS-082E	Adobe Photoshop for Print and Web Design	3
CIS-083E	Adobe Photoshop Advanced Concepts for Print and Web Design	3
CIS-082H	Web-Based Animation with Flash	3
Required Courses		9
CERTIFICATE TOTAL		9

Advisor: Dutkiewicz

ADOBE APPLICATIONS SPECIALIST SKILLS CERTIFICATE

Dept./No.	Title	Units
Required Courses:		
CIS-082E	Adobe Photoshop for Print and Web Design	3
CIS-082F	Adobe Illustrator for Print and Web Design I	3
CIS-082G	Adobe InDesign I	3
CIS-082H	Web-Based Animation with Flash	3
CIS-082I	Introduction to Adobe Acrobat	1.5
CIS-083J	Adobe Workflow Projects	3
Required Courses		16.5
CERTIFICATE TOTAL		16.5

Advisor: Dutkiewicz

DREAMWEAVER WEB CONTENT DEVELOPER CERTIFICATE

and employment preparation.

Dept. /No.	Title	Units
Required Courses:		
CIS-082C	Web Publishing I	3
CIS-062	Beginning Dreamweaver	1.5
CIS-063	Intermediate Dreamweaver	1.5
CIS-064	Web Database Design w/Dreamweaver 8	3
CIS-086	Web Page Content Development	2
Required Courses		11
CERTIFICATE TOTAL		11

Note: Courses in a program of study may have prerequisites or advisories; that is, courses that must or should be completed before taking that course. (Example: CIS-083C must be taken before CIS-086.)

Advisor: Dutkiewicz

HTML WEB CONTENT DEVELOPER CERTIFICATE

and employment preparation.

Dept./No.	Title	Units
Required Courses:		
CIS-070B	Windows and Internet	3
CIS-082C	Web Publishing I	3
CIS-083C	Web Publishing II	3
Plus three (3) units from the following:		
CIS-082D	Graphics I	
ART-003A	Basic Design & Color	
ART-031	Digital Photography	3
CIS-086	Web Page Content Development	2
CERTIFICATE TOTAL		14

Note: Courses in a program of study may have prerequisites or advisories; that is, courses that must or should be completed before taking that course. (Example: CIS-083C must be taken before CIS-086.)

Advisor: Dutkiewicz

COMPUTER SCIENCE

COMPUTER PROGRAMMING
CERTIFICATE
and employment preparation.

Dept. /No.	Title	Units
Required Courses:		
CIS-070A	Computer Business Applications for Windows	3
CIS-070B	Windows and Internet	3
CS-073	Introduction to Computer Science	3
Emphasis Area - Programming:		
CS-086	Visual Basic Programming I.	3
CS-086A	Visual Basic Programming II	3
CS-087	Assembler Language Programming	4
CS-089	C++ Programming I	3
CS-089A	C++ Programming II	3

Restricted Electives - choose 6 units from the following:

BUAC-001, BUAC-003, BUAC-004, BUAC-005, BUAC-010, BUAC-064, BUAC-065, BUAC-066, BUMA-001, BUMA-010, BUMA-020A, BUMA-027, BUMA-028, CIS-010, CIS-030, CIS-050, CIS-060, CIS-062, CIS-063, CIS-070C, CIS-072D, CIS-073C, CIS-074 or CS-071D, CIS-076B, CIS-078B, CIS-080 or CS-071E, CIS-082B, CIS-082C, CIS-082D, CIS-082E, CIS-082F, CIS-082G, CIS-082H, CIS-082I, CIS-083B, CIS-083C, CIS-083D, CIS-083E, CIS-083F, CIS-083G, CIS-084A, CIS-084C, CIS-087, CS-001, CS-002A, CS-002B, CS-010, CS-011, CS-012, CS-013, CS-014, CS-080, CS-086A, CS-087, CS-088

Required Courses	9
Emphasis Area	16
Restricted Electives	6
CERTIFICATE TOTAL	31

Advisor: Penaflor

COMPUTER PROGRAMMING
ASSOCIATE OF ARTS DEGREE
and employment preparation.

Dept./ No.	Title	Units
Required Courses:		
CIS-070A	Computer Business Applications for Windows	3
CIS-070B	Windows and Internet	3
CS -073	Intro to Computer Science	3
Emphasis Area - Programming:		
CS-086	Visual Basic Programming I.	3
CS-086A	Visual Basic Programming II	3
CS-087	Assembler Language Programming	4
CS-089	C++ Programming I	3
CS-089A	C++ Programming II	3

Restricted Electives - choose 15 units from the following:

BUAC-001,BUAC-002, BUAC-003, BUAC-004, BUAC-005, BUAC-006, BUAC-010, BUAC-064, BUAC-065, BUAC-066, BUMA-001, BUMA-010, BUMA-020A, BUMA-027, BUMA-028, CIS-010, CIS-030, CIS-050, CIS-060, CIS-062, CIS-063, CIS-064, CIS-070C, CIS-072D, CIS-073C, CIS-074 or CS-071D, CIS-076B, CIS-078B, CIS-080 or CS-071E, CIS-082B, CIS-082C, CIS-082D, CIS-082E, CIS-082F, CIS-082G, CIS-082H, CIS-082I, CIS-083B, CIS-083C, CIS-083D, CIS-083E, CIS-083F, CIS-083G, CIS-084A, CIS-084C, CIS-086, CIS-087, CS-001, CS-002A, CS-002B, CS-002C, CS-002D, CS-010, CS-011, CS-012, CS-013, CS-014, CS-080, CS-088

Required Courses	9
Emphasis Area	16
Restricted Electives	15
CMC General Education Requirement	18
Physical Education Requirement	2-3
DEGREE TOTAL	60-61

Advisor: Penaflor

COMPUTER SCIENCE
ASSOCIATE OF ARTS DEGREE

Dept. /No.	Title	Units
Required Courses:		
CS-073	Intro to Computer Science	3
CS-086	Visual Basic Programming I	3
CS-087	Assembler Lang Program.	4
CS-089	C++ Programming I	3
CS-089A	C++ Programming II	3
MATH-002A	Multivariate Calculus	5
PH-002A	College Physics	4
	and	
PH-002B	College Physics	4
	or	
PH-004A	Engineering Physics	5
	and	
PH-004B	Engineering Physics	5

Required Courses	29-31
CSU or IGETC General Education Requirement	34-43
Physical Education Requirement	2-3
DEGREE TOTAL	65-77

Note: Physics requirements vary between institutions; consult with a faculty advisor before selecting Physics courses.

Advisor: Penaflor

DEVELOPMENTAL EDUCATION

An integral part of the course offerings at Copper Mountain College available to the residents of the Morongo Basin are the basic and academic skills courses offered by Developmental Education. Developmental Education makes it possible for adult students to complete courses in several fundamental skill areas.

The program is open-entry, open-exit, thereby allowing students to register at any time during the school year. Classes are held day and evening on campus. The courses in Adult Education are centered around the learning skills normally acquired in grades 1-8 with the emphasis on developing reading, writing, mathematics, communication, and life skills.

Credit may also be earned for those interested in acquiring their high school diploma. Anyone 18 years of age or older is welcome to begin studies leading to high school graduation. Adults who enter the high school completion program are able to transfer credit received at previous high schools they have attended, as well as to obtain credit for military service, technical school education, and work experience.

CMC also offers a program to prepare students for the GED Test. Many businesses and governmental agencies accept the GED certificate in lieu of the high school diploma. The current class schedule lists testing dates, hours and fees.

Developmental Education offers a noncredit ESL program, which meets the needs of students not fluent in English. Persons from the literacy level to the highly advanced level of English proficiency acquire the skills required for daily living and preparation to enter high school completion, vocational or academic programs.

English as a Second Language

The English as a Second Language Program, which operates on an open-entry basis, offers instruction at all levels of proficiency for persons who are learning English as a second language. All persons 18 years of age and older, regardless of their educational background, are welcome to participate in this program.

El Inglés Como Segundo Idioma

Este programa "open-entry, open-exit" está diseñado para hispanohablantes, parlantes de otros idiomas o para los que hablan el inglés como segundo idioma. El programa de Inglés como Segundo Idioma (ESL) de Copper Mountain College se enfoca en las destrezas linguísticas que son necesarias para funcionar y comunicarse efectivamente en los aspectos siguientes: básico, empleo, escolástico y profesional. Desde el nivel básico hasta el avanzado de habilidad, todo alumno adquiere o mejora las destrezas linguísticas necesarias para la vida cotidiana; o para prepararalos para el diploma de la preparatoria o el de la universidad. Copper Mountain College ofrece diplomas de programas profesionales o cursos de transferencia a otra universidad. Para más información, llame al (760) 366-3791, extensión 4246. OJO: El decir "open-entry, open-exit" indica que estos cursos no reciben notas; y uno puede comenzar a asistir o dejar de asistir a los cursos durante el semestre.

Adult High School Diploma

This program offers a variety of non-credit courses required to earn the adult high school diploma in conjunction with the Morongo Unified School District (MUSD). Although our courses are non-credit, and thus have a unit rating of '0' in a collegiate curriculum, a total of 200 high school credits are required to earn an Adult High School Diploma. Transfer credits from previous accredited institutions are accepted toward the credit requirement and students are also eligible to enroll in appropriate college-level courses to meet requirements. Students should note that there is a 20-credit residency requirement.

The following courses are available for high school credit:

Basic English Grammar	U.S. History
Basic English Composition	American Government
American Literature	Economics
World Literature	Biology
Math Skills	Physical Science
Pre-Algebra	Earth Science
Algebra	Health Science I
World History	Health Science II

GED Testing

The General Education Development (GED) test is an alternative to the adult high school diploma that is accepted by many employers, colleges, vocational training programs and governmental agencies. Students who wish to prepare for this high school equivalency exam are tested in five areas: science, social studies, language arts - reading, mathematics, and language arts - writing. Successful candidates receive their official GED Certificate from the State of California. Students must register in advance in Academic Affairs for the GED test. Space is limited.

GED Test Preparation

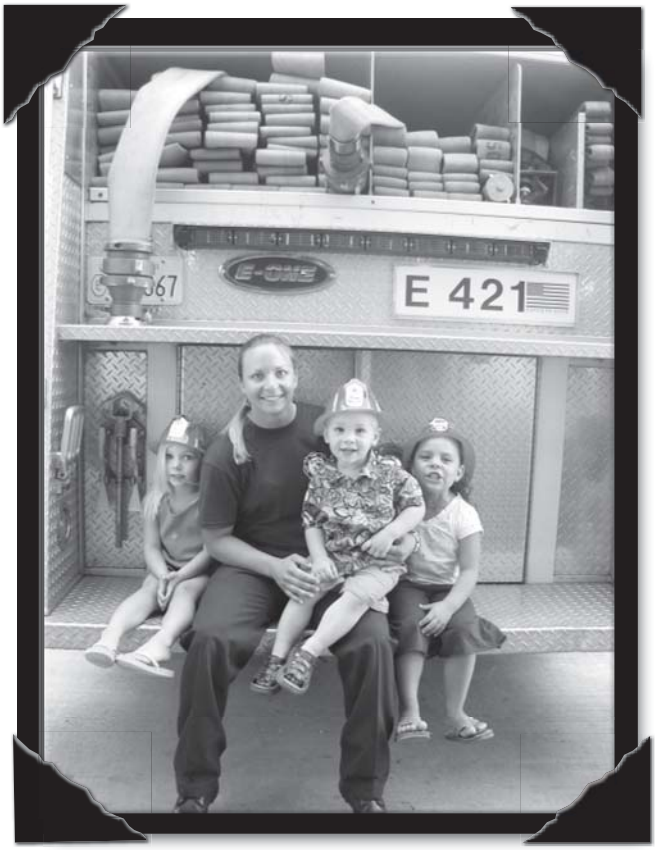
Prospective GED candidates are encouraged to take the pre-test. The results of the GED pre-test will help determine which areas to study before taking the test. The student Success Center offers courses that will help prepare you to successfully pass the GED test. All courses are self paced and free. You may choose to work from a text or opt for the computerized instruction.

EARLY CHILDHOOD EDUCATION

The following courses fulfill the California State requirement of 12 semester units for fully qualified associate teachers in private nursery schools and child care centers.

TITLE 22 ASSOCIATE TEACHER CERTIFICATE

Dept. /No.	Title	Units
Required Courses:		
ECE-001	Intro to Early Childhood Programs	3
ECE-010A	Child Growth & Development	3
ECE-012	Child, Family, & Community	3
ECE-019	Children's Language & Literature	3
ECE-030	Curriculum Design & Implementation	3
CERTIFICATE TOTAL		15
Advisor:	Munsey	



FIRE TECHNOLOGY

Copper Mountain College offers courses in the Fire Technology field that will count toward a certificate or Associate of Science Degree. These courses are designed for students who plan to transfer to a four-year institution, gain employment in the Fire Technology field, or as a refresher for those currently employed in some area of Fire Technology. The approved list of courses include those accredited by the California Fire Service Training and Educational System for State Board of Fire Technology certification.

FIRE TECHNOLOGY CERTIFICATE

and employment preparation.

Dept./ No.	Title	Units
Required Courses:		
FIRE-001	Fire Protection Organizations	3
FIRE-002	Fire Prevention	3
FIRE-003	Fire Protection Equipment and Systems	3
FIRE-004	Building Construction for Fire Protection	3
FIRE-005	Fire Behavior and Combustion	3
FIRE-058	Fire Protection Hydraulics & Water Supply	3
EMT-84	Emergency Medical Technician I	6
Required Courses		24
Electives (with advisor approval)		4
CERTIFICATE TOTAL		28
Advisor:	Munsey	

FIRE TECHNOLOGY ASSOCIATE OF SCIENCE DEGREE

and employment preparation

Dept. /No.	Title	Units
Required Courses:		
FIRE-001	Fire Protection Organizations	3
FIRE-002	Fire Prevention	3
FIRE-003	Fire Protection Equipment and Systems	3
FIRE-004	Building Construction for Fire Protection	3
FIRE-005	Fire Behavior and Combustion	3
FIRE-058	Fire Protection Hydraulics & Water Supply	3
EMT-084	Emergency Medical Technician I	6
Required Courses		24
Fire Electives (with advisor approval)		10
Other Electives		
CMC General Education Requirement		18
Physical Education Requirement		2-3
DEGREE TOTAL		60-61
Advisor:	Munsey	

FOREIGN LANGUAGES

If a student enrolls in foreign language courses (such as 001, 001A, 001B, 002, 002A, 002B or 003) that duplicate previously completed courses, he or she may be allowed unit credit in repeating the course, depending upon his or her previous level of proficiency. Upper division institutions may accept only one of the courses in transfer; either the original or the repeated course.

For language majors and transfers to University of California (UC), all Foreign Language 1A and 1B courses combined will transfer as the equivalent of a first-semester elementary course. All Foreign Language 2A and 2B courses combined will transfer as the equivalent of a second-semester elementary course.

Any student who feels qualified to take a more advanced course than indicated in prior work is encouraged to consult with the instructor.

Many colleges and universities consider it essential that any student receiving the Bachelor of Arts Degree have at least some knowledge of a language and civilization of other cultures. Students who are planning to transfer to a four-year institution should consult their respective catalogs for more specific information.

SPANISH

Associate of Arts Degree

Dept./ No.	Title	Units
Required Courses:		
SPAN-001, 2	Elementary Spanish	10
	or	
SPAN-001AB, 2AB	Elementary Spanish	12
SPAN-003, 4	Intermediate Spanish	8
	Another language	3-5
Required Courses		21-25
CSU or IGETC General Education Requirement		34-43
Transferable Electives (as needed)		3
Physical Education Requirement		2-3
DEGREE TOTAL		60-71
Advisor:	Llort	

HEALTH SCIENCES

Health Sciences includes two degree programs and four certificate programs that prepare men and women for careers in health occupations. Educational pathways include both theoretical instruction on campus and clinical experience in regional healthcare facilities.

Students enrolled in healthcare programs are subject to special guidelines developed to protect patient safety. A student may be asked to withdraw from the Health Sciences program for academic reasons or for other reasons such as drug/alcohol abuse, inappropriate social or emotional behavior or documented acts of dishonesty. The faculty reserve the right to remove from the clinical area any student who, in the faculty member's professional judgement, places the patient in physical or emotional jeopardy. Should this occur, the student will have a conference with the Program Director or the Vice President of Academic Affairs.

Information regarding Health Science Programs can be accessed online at http://www.cmccd.edu/Health_Sciences_Nursing

In compliance with the Americans with Disabilities Act, students, with reasonable accommodation, must be physically and mentally capable of performing the essential functions of the program. The Core Performance Standards adopted by the Health Sciences Division include the following.

Physical Demands — Must be able to:

- be on your feet 6-12 hours at a time and perform activities that include reaching, balancing, carrying, pushing, pulling, stooping, bending and crouching;
- lift and transfer adults and children from a stooped to an upright position to accomplish bed-to-chair and chair-to-bed transfers;
- lift and adjust positions of bedridden patients, including pulling as much as 12 inches toward the head of the bed;
- physically apply up to ten pounds pressure to bleeding sites or to chest in the performance of CPR using hands, wrists and arms;
- maneuver in small spaces quickly and with ease;
- perform fine motor skills that require hand-eye coordination in the use of small instruments, equipment, and syringes;
- feel and compress tissues to assess for size, shape, texture, and temperature.

Senses — Must be able to:

- visually read calibrated scales in increments of one-hundredth of an inch in not more than a three-inch space;
- perform close and distinct visual activities involving persons and paper work;
- visually discriminate depth and possess color perception;
- identify and distinguish odors that are pungent, or the products of infection or metabolic imbalance (e.g., ketones);
- respond and react immediately to auditory instruction, requests, signals, and monitoring equipment;
- perform auditory assessments requiring the distinguishing of variances in sounds (e.g. tones and pitches).

Knowledge — Must be able to:

- learn to perform mathematical calculation for medication preparation and administration in a timely manner;
- learn to communicate effectively, both orally and in writing, using appropriate grammar, vocabulary and word usage as well as medical terminology;
- comprehend verbal and written directions, making correct notations and responding as directed;
- make proper and timely decisions under stressful and emergency situations.

All programs offered by the Health Science Department require a grade of "C" or better (2.0) in any course fulfilling program prerequisite requirements.

Students will have irregular schedules for clinical experiences that may include travel of 60 miles or more to clinical sites, and evening/night/weekend class hours. Additional Health Sciences Dept. Program requirements include criminal background check report (utilizing Health Sciences Dept. approved source), immunizations, physical & mental health fitness verification from a licensed physician or other approved licensed independent practitioner. Information regarding these and other Health Sciences programs requirements can be accessed on the website at: www.cmccd.edu and obtained by contacting the Health Sciences Department at (760) 366-3791 ext. 5801 or attending a scheduled information session (dates/times/locations published in each semester course schedule).

Emergency Medical Technician

The Emergency Medical Technician (EMT) Program prepares individuals to recognize illnesses and injury symptoms and to provide legal permissible emergency treatment set forth by the standards of the State of California, and the San Bernardino County Health Department (SBCHD).

The curriculum consists of 72 hours of theory instruction (lecture), participation in 38 hours of skill demonstration (lab), and 70 hours of field and clinical experience in various high desert agencies.

On completion of this 6-unit course, the student is eligible to sit the NREMT-Basic exam and apply to the local EMS Authority for the county-issued State certification as an Emergency Medical Technician-I which is valid for 2 years. An EMT Refresher course is offered for certificate renewal. On completion of this 2-unit course, the student is eligible to apply to the local EMS Authority for the county-issued State certification renewal as an EMT-I.

This program meets all criteria of the State of California and SBCHD for the Emergency Medical Technician-I training.

This will serve to advise you that, pursuant to California Health and Safety code Section 1799.100, by participating in a course of instruction in emergency medical training you have waived your rights to collect civil damages against the college in the event you sustain an injury.

The code states: "No local agency, entity of state or local government, or other public or private organization which sponsors, authorizes, supports, finances, or supervises the training of people, excluding physicians and surgeons, registered nurses, and licensed vocational nurses, as defined, in emergency medical services in training programs under this part, shall be liable for any civil damages alleged to result from such training program."

Home Health Aide

The Home Health Aide program prepares men and women to assist with the routine care and treatments of clients in their homes. These services include personal health care as well as food purchasing, meal planning, laundry, and light housekeeping.

The course of study includes 27 hours of classroom instruction and 27 hours of supervised clinical experience. Students wishing to enter the program must be currently certified in California as a nursing assistant and have completed the College assessment tests demonstrating eligibility for ENG 051. Specific information regarding the program may be obtained by calling or writing to the Health Science Department.

Nursing Assistant

The Nursing Assistant (NA) program prepares men and women to assist with the routine care and treatment of patients in health care facilities. Working under the direction of the nursing and medical staff, activities of the certified nursing assistant include providing personal care, maintaining safety, and assisting with activities of daily living. Successful completion of the program results in eligibility to take the state approved tests that lead to certification as a nursing assistant.

The course of study includes 72 hours of classroom instruction and at least 108 hours of clinical practice in long-term care facilities. Students wishing to enter the program should have completed the college assessment tests demonstrating eligibility for English 51. Students seeking admission to the course will need to complete information disclosing any past criminal record. If a history exists the student may not be able to continue in the class. Information regarding the program may be obtained by calling or writing to the Health Sciences Deportment.

Registered Nursing Program

The Associate Degree Registered Nursing Program is approved by the California Board of Registered Nursing (BRN). The program is designed to prepare graduates to pass the NCLEX-RN exam and perform as an entry level Registered Nurse. The program is comprised of approximately 37 units of Nursing Theory and Clinical Experience plus approximately 36-40 units of science and general education courses. Students are taught using a combination of classroom theory sessions, hands-on simulation practice sessions in the Nursing Resource Lab (NRL) and live clinical experiences concurrently provided in regional healthcare facilities. Multi-media resources are used to deliver instruction in the classroom and the NRL utilizing technology that includes the most current computerized simulation equipment.

Pre-requisite coursework must be completed prior to admission, with an overall GPA of 2.0 and no grade less than a "C". Most students admitted to the program have completed all other coursework. Students who have not completed all General Education requirements prior to admission must have a plan established to complete those courses prior to completion of the nursing courses. Students cannot complete the nursing program unless they are eligible for graduation with an Associate Degree.

The most current information regarding program requirements and the application process can be found on the college website www.cmccd.edu, select Programs, select the Health Sciences/Nursing link and then use the RN Program tab. Admission selection decisions are made each February for the class to begin the following August (Fall term). Admitted students are required to attend a mandatory orientation session usually held in March of each year.

LVN to RN Program

N-076A Nursing Transitions I and N-076B Nursing Transitions II courses are offered each Spring semester. Vocational Nurses who wish to apply for entry to the RN Program as a VN-RN student must successfully complete both N-076A and N-076B, and have met all other requirements for entry to the RN Program. Applicants must have completed all RN Program prerequisite courses, have completed or be able to complete by graduation all other coursework required for the Associate Degree-Registered Nursing, and hold an active California LVN license. Selected VN-RN applicants enter the RN Program each Fall to complete the second year courses of the two-year RN Program. Applications are accepted at the of N-076B each year from those students who successfully completed both N-076A and N-076B.

Advanced Placement

Prospective RN Program students who have completed nursing or equivalent coursework at another school can apply for advanced placement in the RN Program. Admission decisions are made based on equivalency of coursework and availability of seats in the Program that occur due to attrition. Contact the Health Sciences Dept. at (760) 366-3791 for additional information.

REGISTERED NURSING

Associate of Science Degree

and employment preparation.

Dept. /No.	Title	Units
	RN Program electives to be completed PRIOR to applying to RN program: *It is not required but strongly recommended that students also take Medical Terminology and Basic Pharmacology.*	
BI-015	General Microbiology	5
BI-022	Human Anatomy	4
BI-023	Human Physiology	5
ENG-003A	College Composition	3
MATH-040	Intermediate Algebra	4
PSY-003	Developmental Psychology	3
	The following may be completed AFTER admission to RN program:	
PSY-001	General Psychology	3
SOC-001	Introduction to Sociology	
	or	
ANTH-002	Cultural Anthropology	3
SP-001	Intro. to Human Communication	
	or	
SP-007	Decision Making and Advocacy	
	or	
SP-004	Public Speaking	3
	Choose 3 units from the Humanities area to meet the CMC General Education Requirement. PHIL-013 Perspectives on Death and Dying is highly recommended.	3
First Semester		
N-001A	Nursing Foundations	4.5
N-001B	Basic Concepts Nursing Practice I	4.5
Second Semester		
N-002A	Maternal-Child (Pediatrics) with Family Health	4.5
N-002B	Concepts of Nursing Practice II and Gerontological Nursing I	5
Third Semester		
N-003A	Concepts of Nursing Practice III with Gerontological II	5
N-003B	Psychiatric Nursing and Gerontological Nursing III	4.5
Fourth Semester		
N-004A	Concepts of Nursing Practice IV	5
N-004B	Nursing Management, Leadership and Preceptorship	4
Subtotal:		73
CMC General Education Requirement:		0*
	** Restricted electives and their pre-requistes meet CMC General Ed. Requirements.*	
Physical Education Requirement		2-3
DEGREE TOTAL		75-76
Advisor:	Moody	

Vocational Nursing Program

The Vocational Nursing Program prepares men and women for entry level vocational nursing positions as contributing members of the health care team working under the direction of a registered nurse or licensed physician. They may seek employment in acute or long-term care facilities, doctors' offices or clinics. Vocational nurses assist in data collection, plan and implement nursing care, administer medications and treatments with knowledge of therapeutic results, and maintain a safe environment for patients and their families. Upon successful completion of the program a certificate in vocational nursing is awarded and the graduate is eligible to write the National Council Licensure Examination (NCLEX-PN) for vocational nursing in the state of California. An Associate Degree in Vocational Nursing may be pursued if desired.

Philosophy

The Vocational Nursing Program is an integral part of Copper Mountain College. The Vocational Nursing faculty endorse the institutional mission statement that supports comprehensive educational opportunities for vocational instruction and recognizes the challenge set forth by a diverse, growing and energetic community dedicated to lifelong learning. The program meets needs of the community by preparing students for career opportunities in Vocational Nursing. The purpose of the program is to produce an entry level practitioner of vocational nursing who is eligible to write the licensing examination for vocational nursing and who has the necessary knowledge, skills and attitudes to provide safe, competent nursing care.

Community college students bring a variety of ethnic and cultural backgrounds, life experiences, learning styles, and developmental levels to the learning environment. The college community provides the opportunity for students and faculty to participate in cultural exchange; it encourages the examination and development of ideas through a balanced social forum and provides an environment for growth. We support self-development, including ongoing self-assessment and evaluation.

Philosophy of Humans and Society

We believe each person, regardless of race, creed, religion or culture, is a unique, complex, holistic being and deserving of respect. All persons share with others common human attributes and basic human needs, adapting to physical and psychosocial experiences and stresses. Individuals have an inherent right to strive to attain optimal health and to achieve their full potential in life. They possess dignity, self-worth and have the right to information that will assist them to make informed decisions regarding health care. We believe that access to health care is the right of each member of society.

Health, Illness & Health Care Delivery

We believe health and illness are relative, ever-changing states of being. Individuals exist on a continuum ranging from a state of optimal functioning, to absence of discernible disease, to obvious disease that can result in death. Illness occurs when there is an alteration in the function of one or more body systems.

We believe the health care delivery system is changing quickly in response to societal demands, rapidly changing technology and the increasing life-span. These changes have resulted in a collaborative level of interaction between health care workers and the consumer.

Philosophy of Nursing

Nursing is a caring profession in which the nurse uses cognitive, psychomotor and affective skills to assist individuals to achieve their highest level of health. It is concerned with helping people cope with adverse physiologic, psychosocial, and spiritual responses to illness. Nurses assist individuals to use their available resources to adapt at an optimum level of functioning. The practice of nursing incorporates the use of the nursing process to assess an individual's current and potential health care needs, and to plan, implement and evaluate nursing care.

A variety of caregivers are educated at different levels to provide health care services to the public. The Vocational Nurse is educated to be a responsible member of a health care team, performing basic therapeutic, rehabilitative, and preventive care. The role of the vocational nurse is an evolving one and encompasses providing specific services to patients under the direction of a licensed physician or professional registered nurse.

Philosophy of Nursing Education

Nursing education occurs in a variety of settings and prepares graduates with different levels of expertise. Vocational nursing education involves teaching nursing theory, skills , and attitudes that assist the students to assume responsibility and accountability as vocational nurses. The nursing faculty use a systematic approach to instruction that builds on previously learned knowledge from related disciplines and life experience. Faculty select strategies, organize content, arrange experiences, and facilitate learning taking into consideration cultural factors, ethnic background and the individual learning styles of students.

Philosophy of Teaching and Learning

We believe that learning results in a change in behavior that can be measured and which persists. Teaching and learning involve an interactive process between instructor and student. Optimum learning for a diverse student body occurs in a nonthreatening, supportive environment in which frequent feedback is an essential element. Learning is maximized when the student feels a need to learn and accepts a share of the responsibility of planning and implementing the learning experience. Learning is facilitated when a variety of instructional modalities are coordinated with students' specific learning needs, goals, and individual support systems. Learning progresses from simple to complex, and involves active participation of both the student and the instructor. Ideally, learning is a lifelong process.

Outcome Behaviors

Using the nursing process, the graduate demonstrates the following competencies:

- Assesses basic physical, emotional, spiritual and sociocultural needs of clients using a variety of resources;
- Contributes to the development of nursing care plans, establishing priorities and revising as necessary;
- Provides safe, competent nursing care using accepted standard of practice and making appropriate referrals;
- Evaluates care to determine priorities, goals, and effectiveness of care;
- Uses effective communication skills in nursing role, in therapeutic relationships with clients and families and in collaboration with members of the health team;
- Assumes responsibility and accountability for managing own actions and care delegated to those with lesser preparation;
- Practices within the scope of practice of the licensed nurse;
- Adheres to nursing code of ethics;
- Seeks opportunity for continued professional growth and performance;
- Advocates for the health care consumers through political, economic and societal activities.

VOCATIONAL NURSING
CERTIFICATE
and employment preparation.

(Graduates eligible for Vocational Nurse Licensing Examination in California)
See Brochure for Admission Requirements

Dept./No.	Title	Units
Required Courses:		
BI-022	Human Anatomy	4
BI-023	Human Physiology	5
HS-065	Basic Pharmacology	3
PSY-003	Developmental Psychology	3
VN-001	Vocational Nursing I	5
VN-001L	Vocational Nursing I Lab	4
VN-002	Vocational Nursing II	9
VN-002L	Vocational Nursing II Lab	7
VN-003	Vocational Nursing III	9
VN-003L	Vocational Nursing III Lab	7
CERTIFICATE TOTAL		56
Advisor:	Moody	

VOCATIONAL NURSING
ASSOCIATE OF SCIENCE DEGREE
and employment preparation.

Dept. /No.	Title	Units
Required Courses:		
BI-022	Human Anatomy	4
BI-023	Human Physiology	5
HS-065	Basic Pharmacology	3
PSY-003	Developmental Psychology	3
VN-001	Vocational Nursing I	5
VN-001L	Vocational Nursing I Lab	4
VN-002	Vocational Nursing II	9
VN-002L	Vocational Nursing II Lab	7
VN-003	Vocational Nursing III	9
VN-003L	Vocational Nursing III Lab	7
Required Courses		56
CMC General Education Requirement		18
Physical Education Requirement		2-3
DEGREE TOTAL		76-77
Advisor:	Moody	

Course Sequence

Most students admitted to the Associate Degree Vocational Nursing program have completed all course work except the nursing courses prior to admission. A few, however, may be taking courses concurrently. Listed below is a pattern of sequencing that should be followed. Although many non-nursing courses can be completed anytime prior to this schedule, when taken with nursing courses they must be completed no later than the semester indicated in this plan.

Dept./No.	Title	Units
Prerequisites:		
BI-022	Human Anatomy	4
BI-023	Physiology	5
First Semester		
HS-065	Basic Pharmacology	3
VN-001	Vocational Nursing I	5
VN-001L	Vocational Nursing I Lab	4
Second Semester		
VN-002	Vocational Nursing II	9
VN-002L	Vocational Nursing Lab II	7
PSY-003	Developmental Psychology	3
Third Semester		
VN-003	Vocational Nursing III	9
VN-003L	Vocational Nursing III Lab	7

LIBERAL ARTS

The Associate degree in Liberal Arts is designed for students who wish to have a broad knowledge of liberal arts and sciences. Such knowledge can assist a student in determining a major and/or an "Area of Emphasis". This area of emphasis would be an ideal choice for students who plan on transferring to the California State University (CSU) or University of California (UC). Students can satisfy general education requirements, as well as focus on transferable course work that relate to majors at these institutions. Please consult with a counselor for information regarding your intended major at the specific college or university of your choice.

Areas of Emphasis:

Arts & Humanities courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people, through the ages, in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

Social & Behavioral Sciences courses emphasize the perspective, concepts, theories and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Mathematics & Science courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations.

A minimum of 18 units are required in one of the three Area of Emphasis. For depth of study, 2 or more courses in one discipline is required. Consult with your advisor or counselor for a list of accepted courses for each emphasis area.

LIBERAL ARTS
Associate of Arts Degree

Dept.	No.	Title	Units
Required Courses:			
CSU or IGETC General Education Requirement			34-43
Area of Emphasis			18
Electives (if necessary)			6
Physical Education Requirement			2-3
DEGREE TOTAL			60-70
Advisor:	Munsey		

LIBERAL STUDIES FOR ELEMENTARY SCHOOL PREPARATION AT CSU - SAN BERNARDINO

The Associate of Arts Degree in Liberal Studies for Elementary School Preparation is designed for students who want to become elementary school teachers (Multiple Subject Teaching Credential) in the state of California. The Liberal Studies degree is specifically designed for students who transfer to California State University San Bernardino (CSUSB) and pursue the Liberal Studies, General Track. Those students who plan to transfer to a university other than CSUSB and follow a Liberal Studies degree or program for elementary school teaching, please consult with a counselor or access ASSIST for more detailed requirements at www.assist.org, and consult the catalog of the transfer institution. The Liberal Studies requirements for this degree are specifically for CSUSB.

LIBERAL STUDIES
Associate of Arts Degree

Dept.	No.	Title	Units
Required Courses:			
ECE-010A		Child Growth & Development	3
ECE-010B		Child Development: School Age & Adolescence	3
CIS-070A		Computer Business Applications for Windows	
		or	
CS-073		Introduction to Computer Science	3
CSU General Education Requirement			34-43
Area of Emphasis			24
Physical Education Requirement			2-3
DEGREE TOTAL			60-70
Advisor:		Munsey	

MATHEMATICS

The Mathematics Program offers a full range of mathematics courses. In addition to coursework leading to transfer with a major in mathematics and support of the sciences and engineering, the program offers preparatory courses to prepare the student to take mathematics at a college level.

MATHEMATICS
Associate of Science Degree

Dept./No.	Title	Units
Required Courses:		
MATH-001A	Calculus	5
MATH-001B	Calculus	5
MATH-002A	Multivariate Calculus	5
MATH-200B	Linear Algebra and/or	
MATH-002C	Ordinary Differential Equations	4
PH-004A	Engineering Physics	5
PH-004B	Engineering Physics	5
PH-005	Computer Programming I: C++ for Sciences and Engineering or	
CS-089	C++ Programming I	3
Required Courses		32
CSU or IGETC General Education Requirements		26-33
Physical Education Requirement		2-3
DEGREE TOTAL		60-68
Advisor:	Berger, Thacker	

SCIENCES
BIOLOGICAL AND PHYSICAL

The Division of Fine Arts and Humanities has available a broad offering of courses in the Biological and Physical disciplines. The aim of the department is to provide instruction to the general student population as well as those with a goal of majoring in science. To this end, courses for the non-science major are transferable to other institutions to meet General Education requirements. Courses designed for science majors parallel content, level of instruction and units found in university programs. The department also offers a complete sequence of science courses leading to a nursing program and related paramedical qualifications.

ENVIRONMENTAL SCIENCES
Associate of Science

Dept./No.	Title	Units
Required Courses:		
BI-001A	General Biology - Principles	5
BI-001B	General Biology - Zoology or	
BI-001C	General Biology - Botany	5
CH-001A	General Chemistry (5) or	
CH-003	Introductory General Chemistry	4-5
G-001	Physical Geology or	
G-005	Environmental Geology	4
NR-001	Conservation of Natural Resources	3
NR-001L	Conservation of Natural Resources Lab	1
MATH-010	College Algebra	4
Required Courses		26-27

Restricted Electives - choose 20-25 units from the following:
(Confer with an Advisor.)

BI-001B, BI-001C, ECON-001, G-001, G-005, G-010, GEOG-001, MATH-014, MATH-001A, MATH-001B, NR-002, NR-003, PH-002A, PH-002B, or PH-004A & PH-004B.

Computer courses	3-6
For other course selections confer with advisor.	
Required Courses	26-27
Restricted Electives	20-25
CSU or IGETC General Ed. Requirement (confer with advisor)	12-18
Physical Education Requirement	2-3
DEGREE TOTAL	60-73
Advisor:	Bridenbecker

SOCIAL SCIENCES

Instruction in the Social Sciences at Copper Mountain College includes the following subject areas: Anthropology, Geography, History, Philosophy, Political Science, Psychology, Social Science (General) and Sociology. Students who choose one these areas of emphases are usually preparing to transfer to a four-year college or university to complete their major.

Once a student has decided upon an area of emphasis, he or she should confer with the appropriate advisor in planning a course of study. Students seeking the Bachelor's Degree are encouraged to consider and select their transfer university as early as possible to facilitate coordination of graduation requirements for the A.A. and B.A. degrees.

ANTHROPOLOGY
Associate of Arts Degree

Dept./No.	Title	Units
Required Courses:		
ANTH-001	Introduction to Physical Anthropology	3
ANTH-002	Cultural Anthropology	3
ANTH-003	Archaeology, An Introduction to Prehistory	3
Restricted Electives - choose 15 units from the following:		
ART-002A, BI-001B, BI-004, BI-004L, HIST-003, HIST-004, HIST-017, HIST-019, PSY-012, SOC-014		
Required Courses		9
Restricted Electives		15
CSU or IGETC General Education Requirements		34-43
Physical Education Requirement		2-3
DEGREE TOTAL		60-70
Advisor:	Munsey	

HISTORY
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
ANTH-001	Introduction to Physical Anthropology	3
HIST-003	History of World Civilization I	3
HIST-004	History of World Civilization II	3
HIST-017	US History through Reconstruction	3
HIST-018	US History from Reconstruction to Present	3
PHIL-010	General Logic	3
PS-001	Introduction to Government	3
Required Courses		21
CSU or IGETC General Education Requirements		34-43
Transferable Electives (as needed)		3
Physical Education Requirement		2-3
DEGREE TOTAL		60-70
Advisor:	Itnyre	

PHILOSOPHY
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
PHIL-006	Introduction to Philosophy	3
PHIL-010	General Logic	3
PHIL-012	Religions of the World	3
PHIL-014	Introduction to Ethics	3
Restricted Electives - choose 12 units from the following:		
ANTH-002, HIST-003, HIST-004, PHIL-008, PHIL-009, PHIL-013, PSY-001		
Required Courses		12
Restricted Electives		12
CSU or IGETC General Education Requirements		34-43
Physical Education Requirement		2-3
DEGREE TOTAL		60-70
Advisor:	Itnyre	

POLITICAL SCIENCE
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
PS-001	Introduction to Government	3
PS-002	Intro. to Comparative Governments	
	or	
PS-004	Introduction to International Relations	3
Restricted Electives - choose 18 units from the following:		
AJ-001, AJ-002, AJ-005A, ECON-001, ECON-002, ECON-011, HIST-017, HIST-018, PHIL-006, SOC-001, SOC-002, SOC-004, SOC-014		
Required Courses		6
Restricted Electives		18
CSU or IGETC General Education Requirements		34-43
Physical Education Requirement		2-3
DEGREE TOTAL		60-70
Advisor:	Mitz	

SOCIAL SCIENCES - CONTINUED

PSYCHOLOGY
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
PSY-001	General Psychology	3
PSY-003	Developmental Psychology	3
SOC-001	Introduction to Sociology	3
SOC-003	Fundamentals of Statistics or	
MATH-014	Statistical Methods	4

Restricted Electives: Choose 11 units from the following (in consultation with a counselor):

BI-001A, CIS-070A, PSY-010, PSY-012, PSY-020, PSY-023, PSY-033

Required Courses	13
Restricted Electives	11
CSU or IGETC General Education Requirements	34-42
Physical Education Requirement	2-3
DEGREE TOTAL	60-70

Advisor: Case

SOCIAL SCIENCE
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
ECON-001	Principles of Macroeconomics	3
HIST-003	History of World Civilization I	3
HIST-018	US History from Reconstruction to Present	3
PHIL-006	Introduction to Philosophy	3
PS-001	Introduction to Government	3
PS-002	Introduction to Comparative Government	3
PSY-001	General Psychology	3

Required Courses	21
CSU or IGETC General Education Requirements	37-46
Physical Education Requirement	2-3
DEGREE TOTAL	60-70

Advisor: Case, Mitz

SOCIOLOGY
Associate of Arts Degree

Dept. /No.	Title	Units
Required Courses:		
SOC-001	Introduction to Sociology	3
SOC-002	Social Problems	3
SOC-003	Fundamentals of Statistics or	
MATH-014	Statistical Methods	4
SOC-004	Sociological Analysis & Critical Thinking	3

Restricted Electives: Choose 12 units from the following:

AJ-001, AJ-010, ANTH-001, ANTH-002, ANTH-003, BUAC-001, BUMA-001, BUMA-010, CIS-070A, CS-073, CS-088, CS-089, ECE-001, ECE-012, ECON-001, ECON-002, GEOG-001, GEOG-002, GEOG-007, GEOG-010, HIST-004, HIST-017, HIST-018, MATH-001A, NR-001, PHIL-010, PHIL-014, PS-001, PS-002, PS-004, PSY-001, PSY-003, PSY-023, SOC-010, SOC-014

Required Courses	13
Restricted Electives	12
CSU or IGETC General Education Requirements	33-42
Physical Education Requirement	2-3
DEGREE TOTAL	60-70

Advisor: Danza

COURSE DESCRIPTIONS

ACADEMIC SKILLS CENTER (ASC)

ASC 005A
TUTOR TRAINING

.5 Unit
Lecture: .2 hour
Laboratory: .9 hours

This course provides the student with general tutoring skills that can be utilized regardless of the subject matter. The tutoring skills covered are based on contemporary research in the psychology of learning, pedagogy, instruction, design, training, and communications.

Prerequisites: Current enrollment with a minimum of 6 units; instructor recommendation; and a grade of "B" or better in the course to be tutored.

ASC 005B
TUTOR TRAINING

.5 Unit
Lecture: .2 hour
Laboratory: .9 hours

This course provides the student with advanced tutoring skills that can be utilized regardless of the subject matter. Students will continue to improve upon the basic tutor training provided in ASC-005A. The course also considers mentoring new tutors, facilitating group tutor activities, team building, assertiveness training, and matching tutor techniques to personality types.

Prerequisites: ASC 005A; current enrollment with a minimum of 6 units; instructor recommendation; and a grade of "B" or better in the course to be tutored.

ASC 054
APPLIED STUDY SKILLS

1 Unit
Lecture: 1 hour

This course is designed to enhance the student's learning ability in college by providing guided instruction in development of successful study habits. Content includes the following skills: information gathering; note taking; critical reading and retention; listening skills; analyzing instruction style; preparation for and taking quizzes, tests, and examinations; time management; self-motivation and resource tours.

ASC 097A-D
SUPPLEMENTAL LEARNING LAB

0.5 Unit
Laboratory: 1.5 hours

This course provides computer assisted instruction and materials supplementary to the instructor's classroom and/or laboratory presentation to advance the student's knowledge and/or personal growth.

Corequisite: Enrollment in an academic course.

ASC 098A-D
SUPPLEMENTAL LEARNING LAB

1 Unit
Laboratory: 3 hours

This course provides computer assisted instruction and materials supplementary to the instructor's classroom and/or laboratory presentation to advance the student's knowledge and/or personal growth.

Corequisite: Enrollment in an academic course.

ASC 100
SUPERVISED TUTORING

0.0 Unit

This course is an open entry/open exit environment where college students with learning needs in academic subjects receive tutoring through one-to-one contact and small group instructions. Students may register while semester is in progress.

ADMINISTRATION OF JUSTICE (AJ)

AJ 001
INTRODUCTION TO THE ADMINISTRATION OF JUSTICE

3 Units
Lecture: 3 hours

This is a study of the History and Philosophy of Administration of Justice in America. It includes a recapitulation of subsystems, role expectations, and their interrelationships. It covers theories of crime, punishment, rehabilitation, ethics, education and training for professionals in the system.

Prerequisite: ENG 051
CSU, UC, Associate Degree Applicable

AJ 002
CRIMINAL LAW

3 Units
Lecture: 3 hours

This is a study of the historical development, philosophy of law and constitutional provisions, definitions, classification of crimes, and their application to the system of administration of justice. It includes legal research, study of case law, methodology, and concepts of law as a social force.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, UC, Associate Degree Applicable

AJ 003
LEGAL ASPECTS OF EVIDENCE

3 Units
Lecture: 3 hours

This course includes a study of the origin, development, philosophy, and constitutional basis for the Rules of Evidence. It includes constitutional and procedural considerations affecting search and seizure, kinds and degrees of evidence and the rules governing admissibility at trial, judicial decisions interpreting individual rights, and case studies.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 004
PRINCIPLES & PROCEDURES OF THE JUSTICE SYSTEM

3 Units
Lecture: 3 hours

This is an in-depth study of the role and responsibilities of each segment within the Justice System, law enforcement, judicial and corrections. It includes exposure to past, present, and future subsystem procedures from initial entry to final disposition, and the relationship each segment maintains with its system members and the community.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 005A
MULTICULTURAL ISSUES WITHIN PUBLIC SAFETY

3 Units
Lecture: 3 hours

The purpose of this course is to present students with a perspective of major cultural groups in California that transcends the views commonly found in society. The course explores how differences in culture, ethnicity, race, prejudice, and ethnocentrism are addressed in the Justice System.

Prerequisite: ENG 051
CSU, UC, Associate Degree Applicable

AJ 006
PRINCIPLES OF INVESTIGATIONS

3 Units
Lecture: 3 hours

This course includes the study of basic principles of all types of investigations utilized in the Justice System. Coverage includes human aspects in dealing with the public, specific knowledge necessary for handling crime scenes, interviews, evidence, surveillance, follow-up, technical resources, and case preparation.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 007
CRIMINAL SUBSTANTIVE LAW

3 Units
Lecture: 3 hours

This is an in-depth study of the substantive laws commonly encountered by the municipal, county, or state police officer, investigator or other criminal justice employee. The scope of the course includes misdemeanor and felony violations of the criminal statutes, provides an understanding of California Codified Law, and an overview of case decisions.

Prerequisite: ENG 051
Advisory: AJ 002
CSU, Associate Degree Applicable

AJ 008
CONCEPTS OF ENFORCEMENT SERVICES

3 Units
Lecture: 3 hours

Topics discussed in this course include: exploration of theories, philosophies, and concepts related to the role expectations of the line enforcement officer which include patrol, traffic, and public service responsibilities.

Advisory: AJ 001
Prerequisite: ENG 051
CSU, Associate Degree Applicable

AJ 009
TRAFFIC CONTROL

3 Units
Lecture: 3 hours

Students study basic accident investigation; the use of the State Accident Report Form; the principles of "selective" enforcement; parking and intersection control; basic provisions of the California Vehicle Code governing the operation of motor vehicles; and the responsibilities of the community in traffic control.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 010
JUVENILE LAW AND PROCEDURE

3 Units
Lecture: 3 hours

This course introduces major types of criminal behavior, role careers of offenders and factors which contribute to criminality or delinquency. It covers methods used in dealing with offenders in the justice system; the changing role of law enforcement and judicial, probation, parole, and institutions; changes of the law in crime control and treatment processes, and techniques of handling juveniles.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 014
CRIME SCENE AND LABORATORY TECHNIQUES

3 Units
Lecture: 3 hours

This course provides an introduction to the field of criminalistic. The role of the laboratory, limits of scientific conclusions, technical equipment, examining physical evidence, common types of cameras, darkroom techniques, and fingerprints are included.

Prerequisite: ENG 051
Advisory: AJ 001
Associate Degree Applicable

AJ 016
NARCOTICS CONTROL

3 Units
Lecture: 3 hours

This is a study of the laws relating to narcotics and dangerous drugs as well as the procedures and problems in investigations and the control of violations of narcotic laws. Students learn how to identify narcotics and dangerous drugs; how to assess their effect on users; and how to prepare a case for court presentation.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 017
WILDLIFE LAW ENFORCEMENT

3 Units
Lecture: 3 hours

This course provides information relating to wildlife law enforcement in the United States and California. Topics studied include: the relationships between Federal and State wildlife laws and regulations, laws as a wildlife management tool, perpetuating wildlife resources, qualifications of wildlife law enforcement officers, duties and responsibilities, enforcement procedures, court systems, fines and forfeitures, hunter safety program, public responsibilities, preservation of the environment, and conserving wildlife.

Prerequisite: ENG 051
Associate Degree Applicable

AJ 018
CONSTITUTIONAL LAW FOR POLICE

3 Units
Lecture: 3 hours

This course covers the analysis of Constitutional provisions and appellate court decisions. Specific topics studied include history of the United States Constitution, freedom of speech, press and assembly, authority to detain and arrest, search and seizure, wiretapping, eavesdropping and visual surveillance, interrogations and confessions, self incrimination, assistance of counsel, multiple prosecutions, right to a fair trial, and civil rights.

Prerequisite: ENG 051
Advisory: AJ 001
Associate Degree Applicable

AJ 019
PEACE OFFICER ARREST/FIREARMS

4 Units
Lecture: 4 hours

This course provides training required by Penal Code Section 832, for peace officers, including ethics, discretionary decision making, arrest, search and seizure, law evidence, investigations, communications and firearms.

As of January 1, 1999, the State of California (PC13511.5) requires all students, not sponsored by a law enforcement agency, that are enrolled in the arrest and firearms course be cleared by the California Department of Justice (DOJ) in order to attend the firearms portion of the course. Specifically, each student who attends the firearms portion of the course will be required to submit fingerprints to the California DOJ. A letter of clearance is then mailed to the student who must present the original to Copper Mountain College prior to attending the firearms portion of the course. The appropriate form and directions for submitting fingerprints shall be obtained from Academic Affairs, Copper Mountain College.

Associate Degree Applicable

AJ 022
POLICE SUPERVISION

3 Units
Lecture: 3 hours

This course covers the duties and responsibilities of the Police Supervisor. It is directed to the supervisor's relationship to management, leadership, morale, discipline, communications, principles, and performance evaluation. It also covers the practical aspects of the supervisory training function.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 024
REPORT WRITING

3 Units
Lecture: 3 hours

This course emphasizes the procedures and practices commonly used to gather data and information and prepare a variety of written reports and records. Students learn to write criminal justice reports that meet statistical, legal, and prosecution requirements of the criminal justice system. The course provides students with an abundant practice in writing effective reports, bulletins, memos, letters, and other short papers.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AJ 030
CORRECTIONAL SYSTEMS

3 Units
Lecture: 3 hours

Criminals and institutional personnel involved in corrections at all levels are reviewed in depth. History, politics, and contemporary correction issues such as punishment, theories, sentencing alternatives, prison experience, and prisoner rights, female and juvenile incarceration problems, over crowding, and twenty-first century corrections are examined.

Prerequisite: ENG 051
Advisory: AJ 001
CSU, Associate Degree Applicable

AMERICAN SIGN LANGUAGE (ASL)

For IGETC purposes, two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at CMC (Foreign Language 1 or 1A & 1B.)

ASL 001
ELEMENTARY AMERICAN SIGN LANGUAGE

5 Units
Lecture: 5 hours

This course is an introduction to American Deaf culture through the language of American Sign Language (ASL) and includes basic sign vocabulary, grammar, the manual alphabet, receptive and expressive skills, fingerspelling, nonverbal techniques, and language philosophies related to the Deaf culture. Students also explore the historical and cultural aspects of the Deaf community. This course is equivalent to ASL 001A and ASL 001B.

Distance Modality: Online, Hybrid.
CSU, UC, Associate Degree Applicable

ASL 001A
ELEMENTARY AMERICAN SIGN LANGUAGE

3 Units
Lecture: 3 hours

This course is an introduction to American Deaf Culture through the language of American Sign Language (ASL) and includes basic sign vocabulary, grammar, the manual alphabet, and language philosophies related to the Deaf culture. Students are given the opportunity to explore the historical and cultural aspects of the Deaf community.

CSU, UC, Associate Degree Applicable

ASL 001B
ELEMENTARY AMERICAN SIGN LANGUAGE

3 Units
Lecture: 3 hours

This course is an expansion of American Sign Language (ASL) 001A with an emphasis on additional sign vocabulary, acquisition of more complex grammatical structures, improvement of basic receptive and expressive skills, finger spelling, and nonverbal techniques. Students will continue to expand their language philosophies related to the Deaf culture and are provided further opportunity to continue the study of the historical and cultural aspects of the Deaf community.

Prerequisite: ASL 001A
CSU, UC, Associate Degree Applicable

ASL 002
INTERMEDIATE AMERICAN SIGN LANGUAGE

5 Units
Lecture: 5 hours
Laboratory: 1 hour

This course continues to build upon the topics, vocabulary, grammar, and conversational skills introduced in American Sign Language (ASL) 001. Students further study specific language and cultural behaviors, how to control the pace of a conversation, and are encouraged to apply Deaf culture communication skills in a variety of classroom and realistic situations. Students extend and continue to develop their previously acquired knowledge and skills as well as focus on developing awareness and cultural sensitivity to Deaf values and norms. This course is equivalent to ASL 002A and ASL 002B.

Distance Modality: Online, Hybrid
Prerequisite: ASL 001 or ASL 001B
CSU, UC, Associate Degree Applicable

ASL 002A
INTERMEDIATE AMERICAN SIGN LANGUAGE

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course continues to build upon the topics, vocabulary, and grammar introduced in American Sign Language (ASL) 001A and 001B. Students are encouraged to apply Deaf culture communication skills in a variety of classroom and realistic situations. Students extend and continue to develop their previously acquired knowledge and skills as well as their awareness and cultural sensitivity to Deaf values and norms.

Prerequisite: ASL 001 or ASL 001B
CSU, UC, Associate Degree Applicable

ASL 002B
INTERMEDIATE AMERICAN SIGN LANGUAGE

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course continues the material and conversational skills presented in American Sign Language 002A. Students further study specific language and cultural behaviors, and how to control the pace of a conversation. The class focuses on developing awareness and cultural sensitivity to Deaf values and norms.

Prerequisite: ASL 002A
CSU, UC, Associate Degree Applicable

ANTHROPOLOGY (ANTH)

ANTH 001
INTRODUCTION TO PHYSICAL ANTHROPOLOGY

3 Units
Lecture: 3 hours

This course is a study of the origins of humans and their place in nature. Topics emphasized include the mechanisms of biological evolution, the physical form and behavior of the nonhuman primates, the fossil record of early humans and our current racial variability.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ANTH 002
CULTURAL ANTHROPOLOGY

3 Units
Lecture: 3 hours

This course is a topical introduction to the cross-cultural study of human societies. Among the topics discussed are food-getting practices, marriage customs, kinship systems, social organization, and supernatural beliefs. Also emphasized are theories of culture and the nature of cultural change.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ANTH 003
ARCHAEOLOGY, AN INTRODUCTION TO PREHISTORY

3 Units
Lecture: 3 hours

This course is an introduction to human prehistory spanning the period from the earliest toolmakers to the recent past. It describes and explains human cultural developments from data collected on all continents. The tools, techniques, and methodologies of archaeological investigations are examined and evaluated.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ART (ART)

ART 001A
DRAWING AND COMPOSITION

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course introduces basic concepts and techniques in drawing and composition. Emphasis is on the development of observation, and the translation of 3-dimensional form and space into 2-dimensional drawings. Through the use of a variety of drawing media and subject matter, students will develop the ability to perceive, define, and organize shape, contour, volume, space, and light.

Advisory: RDG 051
CSU, UC, Associate Degree Applicable

ART 001B
DRAWING AND COMPOSITION

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course introduces intermediate concepts and techniques in drawing and composition. Students build on basic level skills, with emphasis placed on the development of images through the use of intermediate technical processes, theories and composition. Basic concepts of monochromatic color are introduced, such as warm, cool, and saturation. Historical applications of drawing and conceptual approaches to mark-making are studied.

Prerequisite: ART 001A
CSU, UC, Associate Degree Applicable

ART 001C
DRAWING AND COMPOSITION

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course offers advanced study of drawing problems with an emphasis on color media. Students build on intermediate level skills through a continued study of traditional and nontraditional drawing approaches, and are introduced to advanced drawing problems. Color media is introduced, along with its technical, theoretical, and compositional applications. Students continue to study historical context of mark-making and drawing.

Prerequisite: ART 001B
CSU, UC, Associate Degree Applicable

ART 001D
DRAWING AND COMPOSITION

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course offers special studies of advanced drawing problems. Student assignments encourage creativity through individual expression and portfolio development. Under faculty guidance, students develop a pictorial series resulting in an advanced personal portfolio.

Prerequisite: ART 001C
CSU, UC, Associate Degree Applicable

ART 002A
HISTORY OF ART

3 Units
Lecture: 3 hours

This survey course examines the art of the ancient world. Illustrated lectures and classroom activities provide an overview of the study of architecture, sculpture, painting, and other visual art forms from prehistoric cultures. Mesopotamian, Egyptian, Aegean, Greek, Etruscan, Roman, Early Christian, and Byzantine artistic forms will also be presented.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

ART 002B
HISTORY OF ART

3 Units
Lecture: 3 hours

This survey course examines the history of art from the early Middle Ages through the Baroque era. Illustrated lectures are used in the study of the architecture, sculpture, painting and other visual art forms of non-western societies, including Islamic, Native American, African, Japanese, and Chinese. Western art studies include Early Medieval, Romanesque, Gothic, Renaissance, Northern Renaissance, Mannerist, and Baroque styles.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

ART 002C
HISTORY OF MODERN ART

3 Units
Lecture: 3 hours

The art of Europe, America, and other world cultures, from the nineteenth century to the present, is examined in this course. Students will participate in illustrated lectures on significant movements in painting, sculpture, and architecture of this period, including Romanticism, Realism, Impressionism, Expressionism, Cubism, Dada, Surrealism, Abstract Expressionism, Pop Art and contemporary directions.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

ART 002D
HISTORY OF POSTMODERN ART (ART SINCE 1950)

3 Units
Lecture: 3 hours

This course examines the art of Europe, America, and other world cultures from 1950 to the present. Illustrated lectures and on-site viewing of art works focus on significant movements in paintings, sculpture, and architecture of this period which include: Neo-dada, Pop Art, Op Art, Earth Works, Performance Art, Graffiti Art, Installation Art, Conceptual Art, Environmental Art, and New Realism. Ethnicity and gender issues related to postmodernism will also be discussed, as well as global pluralism.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ART 003A
BASIC DESIGN AND COLOR

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is a beginning course introducing the concepts, applications, and historical references related to two-dimensional art and composition. Design principles such as unity, emphasis, contrast, balance, proportion, and directional forces are also studied. Students gain insight and experience in compositional problem solving.

CSU, UC, Associate Degree Applicable

ART 004
THREE-DIMENSIONAL DESIGN

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course investigates the factors determining the designs of both the utilitarian objects. Through a study of shapes, form and space, students gain experience solving three-dimensional design problems. Techniques and materials are studied through construction/assemblage, modeling, and relief casting processes.

CSU, UC, Associate Degree Applicable

ART 005A
LIFE DRAWING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is a basic course in the study of the human figure through the use of a model. Traditional and contemporary drawing concepts and approaches are explored with reference to art history. Representational and expressive qualities are investigated through the elements and design principles of gesture and contour line, weight proportion, and foreshortening.

CSU, UC, Associate Degree Applicable

ART 005B
ADVANCED LIFE DRAWING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an intermediate to advanced course in the study of the human figure through the use of a model. Traditional and Contemporary drawing concepts and approaches are explored with references to art history. Students explore a variety of drawing materials and techniques, with emphasis in developing and individual style of drawing the figure. The course may be taken for a total of three times.

Prerequisite: ART 005A
CSU, UC, Associate Degree Applicable

ART 007A
CERAMICS

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is a basic course that introduces hand-building and wheel-throwing methods of ceramics, including decorating, glazing, and firing techniques. Utilitarian design elements and the production of basic pottery forms are emphasized. Students will gain an appreciation of the historical context of ceramics.

CSU, UC, Associate Degree Applicable

ART 007B
CERAMICS

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an intermediate course that includes pottery making methods, concepts, and applications of clay as a sculptural medium. The techniques of decorating, glazing, and firing are explored, along with the elements and principles of design. Students will deepen their knowledge of the historical context of ceramics.

Prerequisite: ART 007A
CSU, UC, Associate Degree Applicable

ART 007C
CERAMICS

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an advanced course that includes pottery making methods, concepts, and applications of clay as a sculptural medium. The techniques of decorating, glazing, and firing are explored, along with the elements and principles of design. Students will further their knowledge of the historical context of ceramics.

Prerequisite: ART 007B
CSU, UC, Associate Degree Applicable

ART 007D
CERAMICS
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course offers advanced students an opportunity to continue specialized studies. Emphasis is given to glaze formulation, kiln construction, and firing techniques, and includes the application of advanced concepts and theories of ceramics. Students will further their knowledge of the historical context of ceramics.

Prerequisite: ART 007C
CSU, UC, Associate Degree Applicable

ART 007E
CLAY FOR TEACHERS
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course offers a basic knowledge of ceramics to students who plan to teach or are currently teaching. Its emphasis is on methods and processes suited to elementary schools, recreation centers, and youth programs. Laboratory work includes aspects of clay forming, decorating, and firing.

CSU, Associate Degree Applicable

ART 008
ADVERTISING ART
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course provides experience in problems relating to print media advertising, package design, graphic design, and production methods.

Advisory: ART 040
CSU, Associate Degree Applicable

ART 009A
PRINTMAKING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course introduces basic hand processes in the making of prints by exploring different technical methods. These methods include relief, intaglio, stencil and monoprint. The class includes an exploration of photo printmaking and an introduction to computer applications for image development.

CSU, UC, Associate Degree Applicable

ART 009B
PRINTMAKING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is a further exploration of basic methods of producing prints and of developing further competence in plate development and printing. Class work focuses on attaining competence in the technique of aquatint as well as improving other basic etching and drypoint skills.

Prerequisite: ART 009A
CSU, UC, Associate Degree Applicable

ART 009C
PRINTMAKING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course continues intermediate level technical approaches and focuses on a specific technical area within the printmaking field. Students concentrate on developing their own personal style.

Prerequisite: ART 009B
CSU, UC, Associate Degree Applicable

ART 009D
PRINTMAKING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course offers students an opportunity to work on special problems and projects in printmaking.

Prerequisite: ART 009C
CSU, UC, Associate Degree Applicable

ART 010
INTRODUCTION TO ART
3 Units
Lecture: 3 hours

This course is an introduction to the concepts, techniques, and social forces that shape and reflect our visual world. Emphasis is placed on gaining insights and developing an understanding of the variables inherent in planning, organizing, and making a work of art.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ART 011A
SCULPTURE
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is a basic course in the principles, theories, and techniques of sculpture. Students explore three-dimensional forms with a variety of materials and techniques. Additive, subtractive, assemblage, and relief casting processes are explored. Trends in sculpture and three-dimensional art from pre-history to contemporary periods will be studied.

Advisory: ART 001A and ART 004
CSU, UC, Associate Degree Applicable

ART 011B
SCULPTURE
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an intermediate course in the principles, theories, and techniques of sculpture. Students explore three-dimensional forms with a variety of materials and approaches. Additive, subtractive, assemblage, mold-making, casting processes are explored. Trends in sculpture and three-dimensional art from pre-history to contemporary periods will be studied further.

Prerequisite: ART 011A
CSU, UC, Associate Degree Applicable

ART 011C
SCULPTURE
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an advanced course in the principles, theories, and techniques of sculpture. Students explore three-dimensional forms with a variety of materials and approaches. Advanced methods of additive, subtractive, assemblage, mold-making, and casting are explored. Trends in sculpture and three-dimensional art from pre-history to contemporary periods will be studied at an advanced level.

Prerequisite: ART 011B
CSU, UC, Associate Degree Applicable

ART 011D
SCULPTURE
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course offers special studies of advanced sculptural problems. Student assignments continue to encourage creativity through individual expression and thematic development. Emphasis is on developing a body of work and the presentation of a three-dimensional portfolio. Trends in sculpture and three-dimensional art from pre-history to contemporary periods will be studied in relation to individual advancement.

Prerequisite: ART 011C
CSU, UC, Associate Degree Applicable

ART 013A
RELIEF PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

Students in this course study basic hand processes in the making of relief prints. Class work focuses on attaining competence in the techniques of linoleum block printing. Drawing skills are recommended.

CSU, UC, Associate Degree Applicable

ART 013B
RELIEF PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

Students in this course study basic hand processes in the making of relief prints. Class work focuses on attaining competence in the techniques of wood block printing. Drawing skills are recommended.

Prerequisite: ART 013A
CSU, UC, Associate Degree Applicable

ART 013C
RELIEF PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

Students in this course study advanced hand processes in the making of relief prints. Class work focuses on attaining competence in the techniques of collagraph printing. Drawing skills are recommended.

Prerequisite: ART 013B
CSU, UC, Associate Degree Applicable

ART 013D
RELIEF PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

Students in this course study advanced hand processes in the making of relief prints. Class work focuses on attaining competence in multicolor and multiplate relief prints. Drawing skills are recommended.

Prerequisite: ART 013C
CSU, UC, Associate Degree Applicable

ART 014A
SCREEN PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course offers the study of hand processes in the making of silkscreen prints. Class work focuses on attaining competence in the use of tools, compositional approaches, and direct processes of stencil making. Historical aspects of screenprinting will be explored.

Advisory: ART 03A
CSU, UC, Associate Degree Applicable

ART 014B
ADVANCED SCREEN PRINTING
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course introduces photostenciling methods, and furthers the study of intermediate to advanced hand processes in the making of silkscreen prints. Advanced students engage in selected methods and individual style development. Course may be taken for a total of three times.

Prerequisite: ART 014A
CSU, UC, Associate Degree Applicable

ART 020A-D
CERAMIC SCULPTURE
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is an introduction to the fundamental elements of the ceramic sculpture process in which students are taught to model ceramic sculpture and complete the finishing process with several methods of kiln firing.

Prerequisite: ART 020 A-C respectively
Advisory: ART 011A
CSU, UC, Associate Degree Applicable

ART 021A
PAINTING/WATERCOLOR
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is an introduction to the transparent techniques of watercolor painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Students will gain an appreciation of the historical context of watercolor.

Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 021B
PAINTING/WATERCOLOR
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is an intermediate course including transparent and opaque techniques of watercolor painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Students will further their appreciation of the historical context of watercolor.

Prerequisite: ART 021A
CSU, UC, Associate Degree Applicable

ART 021C
PAINTING/WATERCOLOR
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an advanced course in the concepts and techniques of watercolor painting, and introduces applications of mixed media. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Traditional methods, and contemporary approaches and concepts are studied. Students are encouraged to begin the development of a personal style.

Prerequisite: ART 021B
CSU, UC, Associate Degree Applicable

ART 021D
PAINTING/WATERCOLOR
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course provides the advanced student an opportunity to work in selected watercolor painting methods, and include mixed media and collage approaches. Students continue to explore personal themes and methods, with emphasis on portfolio development.

Prerequisite: ART 021C
CSU, UC, Associate Degree Applicable

ART 023A
PAINTING/OIL
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is an introduction to the techniques of oil painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Studies will include historical contexts, traditional methods, along with contemporary approaches and concepts.

Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 023B
PAINTING/OIL
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an intermediate course in the methods of oil painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Historical contexts, traditional methods, along with contemporary approaches and concepts will be further studied.

Prerequisite: ART 023A
CSU, UC, Associate Degree Applicable

ART 023C
PAINTING/OIL
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an advanced course in the methods of oil painting, and introduces applications of mixed media and collage. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Historical contexts, along with traditional methods, contemporary approaches, and concepts are studied in depth. Students are encouraged to begin the development of a personal style.

Prerequisite: ART 023B
CSU, UC, Associate Degree Applicable

ART 023D
PAINTING/OIL
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course provides the advanced student an opportunity to work in selected oil painting methods. The course includes the historical, philosophical and aesthetic aspects of oil painting and mixed media exploration. Students continue to develop personal themes and methods, with emphasis on portfolio development.

Prerequisite: ART 023C
CSU, UC, Associate Degree Applicable

ART 025A
PAINTING/ACRYLIC
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is an introduction to the techniques of acrylic painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Traditional methods, along with contemporary approaches and concepts, are studied.

Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 025B
PAINTING/ACRYLIC
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an intermediate course in the methods of acrylic painting. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Students gain a more extensive understanding of traditional methods and contemporary approaches and concepts in the acrylic medium.

Prerequisite: ART 025A
CSU, UC, Associate Degree Applicable

ART 025C
PAINTING/ACRYLIC
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This is an advanced course in the methods of acrylic painting, and introduces applications of mixed media and collage. Compositional elements and principles are studied through themes of landscape, still life, portraiture, and the non-objective. Students gain a deeper understanding of traditional methods along with contemporary approaches and concepts. Students are encouraged to begin the development of a personal style.

Prerequisite: ART 025B
CSU, UC, Associate Degree Applicable

ART 025D
PAINTING/ACRYLIC
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course provides the advanced student an opportunity to work in selected acrylic painting methods and includes mixed media exploration. Students continue to develop personal themes and methods with emphasis on portfolio development.

Prerequisite: ART 025C
CSU, UC, Associate Degree Applicable

ART 031
DIGITAL PHOTOGRAPHY
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides an introduction to the tools, materials, and techniques of digital photography. Students learn to capture images using a digital camera or camcorder. Topics include the use of digital interfaces, printers and file formats as well as the preparation of images for web use. A digital camera or digital video camcorder is required.

CSU, UC Associate Degree Applicable

ART 033
HISTORY OF PHOTOGRAPHY

3 Units
Lecture: 3 hours

This course is a history of photography from its beginning in the mid-nineteenth century to the present time. Illustrated lectures on the technology, application and aesthetics of photography as a fine art form will include the significant movements which contributed to the establishment of photography as one of the major forms of art and communication in the twentieth century.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

ART 040
GRAPHIC DESIGN I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

Students in this course utilize computers to solve visual communication and design problems using graphic components. Topics covered include typography, logos/marks/symbols/pictographs, corporate identity, graphic techniques (both digital and traditional), introduction to advertising design, digital prepress and press. Adobe Photoshop and Adobe Illustrator software are used to create final images.

Prerequisite: ART 003A
Advisory: CIS 082D
CSU, UC, Associate Degree Applicable

ART 041
GRAPHIC DESIGN II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

Students in this course utilize computers to solve communication and design problems for traditional and new media using graphic, audio, and animation components. Topics covered include traditional and digital typography, animation, motion graphics, sound, new media as communication, non-linear interactive design, and electronics page design.

Prerequisite: ART 040
CSU, UC, Associate Degree Applicable

ART 080A-D
PAINTING WORKSHOP

1 Unit
Laboratory: 3 hours

This course offers a basic study in the fundamentals of composition and painting techniques. Emphasis is placed on the development of painting skills through painting experience, library research, demonstration, and lecture.

Prerequisite: ART 080 A-D respectively
Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 081A-D
BASIC DRAWING I

1 Unit
Laboratory: 3 hours

This basic course in drawing provides the student with an opportunity to explore the materials and techniques of drawing. Problems of line, space, and texture are studied.

Prerequisite: ART 081 A-D respectively
Advisory: ART 003A
CSU, UC, Associate Degree Applicable

ART 083A-D
LANDSCAPE PAINTING

1 Unit
Laboratory: 3 hours

This course provides the student with an opportunity to explore a subject from nature's landscape, using oil, watercolor, and mixed media.

Prerequisite: ART 083 A-D respectively
Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 084A-D
PAINTING THE DESERT LANDSCAPE AND ITS FLORA

1 Unit
Laboratory: 3 hours

This course provides the student with an opportunity to examine the specific problems associated with painting the local desert landscape and its flora, using watercolor, oil, acrylic, and mixed media. The student will be exposed to a variety of techniques and compositional approaches.

Prerequisite: ART 084 A-D respectively
Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 085A-D
STILL LIFE PAINTING

1 Unit
Laboratory: 3 hours

This course is an introduction to the principles, theories, and techniques of painting still life. The student will investigate various painting media and techniques, with emphasis being placed on the problems of perspective and space, color, and composition associated with still life arrangements and photographs.

Prerequisite: ART 085 A-D respectively
Advisory: ART 001A, ART 003A
CSU, UC, Associate Degree Applicable

ART 097
STUDIO LAB

.5 Unit
Laboratory: 1.5 hours

Studio Lab is an open entry/open exit environment designed to develop studio application skills for students in all segments of the art area. Emphasis is on individual studio art applications with time devoted to completing art/lab projects assigned in specific studio art courses. Students receive a credit/no credit grade mark. May be taken for a total of four times.

Corequisite: Concurrent enrollment in any ART course.

ART 098
STUDIO LAB

1 Unit
Laboratory: 3 hours

Studio Lab is an open entry/open exit environment designed to develop studio application skills for students in all segments of the art area. Emphasis is on individual studio art applications with time devoted to completing art/lab projects assigned in specific studio art courses. Students receive a credit/no credit grade mark. May be taken for a total of four times.

Corequisite: Concurrent enrollment in any ART course.

ASTRONOMY (A)

A 001
DESCRIPTIVE ASTRONOMY

3 Units
Lecture: 3 hours

This course is an introductory survey of planetary, stellar, and galactic astronomy designed for students not majoring in science. This course reviews research techniques, current knowledge, and theory about the planets, stars, galaxies, and the age and origin of the universe.

Distance Modality: Online, Hybrid
Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

A 001L
DESCRIPTIVE ASTRONOMY LAB

1 Unit
Laboratory: 3 hours

This is an introductory laboratory course featuring the practical use of the telescope, an introduction to the geography of the sky, and applications of astronomical methods involving projects performed by the student.

Corequisite: A001 or prior completion
Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

AUTOMOTIVE TECHNOLOGY (AUTO)

A.S.E. — Automotive Standard of Excellence
B.A.R. — Bureau of Automotive Repair
N.A.T.E.F. — National Automotive Technicians Education Foundation

AUTO 004
AUTOMOTIVE PRINCIPLES

4 Units
Lecture: 2 hours
Laboratory: 6 hours

Automotive Principles covers fundamentals, basic knowledge of the automotive repair trade, and automotive engine operation principles. It includes shop safety, hand tools, fasteners, shop math, an overview of basic automotive systems, and automotive engine operation principles. Practical work in the operation, inspection, maintenance and repair of engines is included. Drive train principles, steering mechanisms, brake systems, suspensions, and hydraulic systems will be studied.

Distance Modality: Hybrid
Advisory: ENG 050 or equivalent
Associate Degree Applicable

AUTO 018
ENGINE PERFORMANCE I

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides operating theory and hands-on experience in the operation, diagnosis, and repair of automotive fuel systems with carburetors, basic throttle body, port fuel injection systems and Kettering, electronic, and distributorless ignition systems (DIS). Students learn to use the 4 gas and 5 gas exhaust analyzers, basic oscilloscope operation, and the basis for engine computer and control systems.

Distance Modality: Hybrid
Prerequisite: AUTO 004 or 2-years trade experience
Associate Degree Applicable

AUTO 020
AUTOMOTIVE ELECTRICAL SYSTEMS I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides basic theory and direct experience in automotive electrical systems, operations, trouble shooting, and repair. It covers Ohm's Law, circuits, magnetism, electromagnetism, circuit components, diagrams and electrical schematics.

Distance Modality: Hybrid
Prerequisite: AUTO 004 or 1-year verifiable shop experience
Associate Degree Applicable

AUTO 021
AUTOMOTIVE ELECTRIC SYSTEMS II

4 Units
Lecture: 2.5 hours
Laboratory: 4.5 hours

This course provides further study of the automotive electrical system. It covers basic ignition systems, lighting systems, gauges and warning devices, windshield wipers, and other body related electrical components. This course will also prepare for the State of California Bureau of Automotive Repair's Lamp Inspection License Class "A" test.

Distance Modality: Hybrid
Prerequisite: AUTO 020, or passing ASE Electrical System Test, or completion of 600 hours advanced Regional Occupation Programs (ROP) auto technology course, or 2-years verifiable trade experience
Associate Degree Applicable

AUTO 027A-D
B.A.R. CLEAN AIR COURSE PART I

2.5 Units
Lecture: 2 hours
Laboratory: 1.5 hours

This course covers SMOG inspection rules and regulations, a review of engine performance theory, and the inspection and testing of 1979 and older vehicles. AUTO 027 and AUTO 028 of the B.A.R. Clean Air Course must be taken and passed with a grade of "C" or better to be eligible for a Bureau of Automotive Repair Certificate of Completion. This course is approved by the State of California, Bureau of Automotive Repair.

Prerequisite: 180 hours of Engine Performance and Electrical courses, or passing ASE Engine Performance & Electrical Systems test, or 1-year trade experience in engine tune-up
Associate Degree Applicable

AUTO 028A-D
B.A.R. CLEAN AIR COURSE PART II

2.5 Units
Lecture: 2 hours
Laboratory: 1.5 hours

Part II of the clean air course inspection procedures, diagnosis and repair of 1980 and newer vehicles along with a detailed review of system identification and computer system theory. This course is approved by the State of California, Bureau of Automotive Repair.

Prerequisite: AUTO 027; or 180 hours of Engine Performance and Electrical courses, or passing ASE Engine Performance and Electrical Systems, or 1-year trade experience in engine tune-up
Associate Degree Applicable

AUTO 029
ENGINE PERFORMANCE II

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This is an advanced engine computer and drivability course, which includes the theory, operation, testing, diagnosis, and repair of current automotive systems. It emphasizes diagnostic procedures and techniques using basic and sophisticated test equipment. This course helps prepare students for the smog and Automotive Society of Excellence (ASE) Advanced Engine Performance Specialist Test L1.

Distance Modality: Hybrid
Prerequisite: AUTO 019 or 2-years trade experience
Associate Degree Applicable

AUTO 030
AUTO BRAKE SYSTEMS

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course provides basic theory and direct experience in automotive brake system operation, trouble shooting, and repair. This is the basis for the State Brake Inspection License course (AUTO 31A-D).

Distance Modality: Hybrid
Prerequisite: AUTO 001 or 1-year trade experience
Associate Degree Applicable

AUTO 035
AUTOMOTIVE STEERING, SUSPENSION AND ALIGNMENT

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides basic theory and direct experience in the service and repair of automotive steering systems, suspension systems and wheel alignment. The course includes four-wheel steering; manual and electronic computer-controlled systems; variable assist steering systems; short and long arm-type suspension systems; and strut suspension systems.

Distance Modality: Hybrid
Prerequisite: AUTO 004 or two (2) years trade experience
Advisory: ENG 003A
Associate Degree Applicable

AUTO 036
AUTOMOTIVE BRAKE SYSTEMS

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides basic theory and direct experience in automotive brake systems operation, troubleshooting, and repair as well as the theory, operations, testing, diagnosis, and repair of anti-lock brake systems used in today's vehicles. This course prepares students for the State of California Bureau of Automotive Repair's Brake Inspection Class "A" license test, California State Brake Inspector and Automotive Society of Excellence Brake System test.

Prerequisite: AUTO 004 or 2-years verifiable shop experience
Associate Degree Applicable

AUTO 044
AUTOMOTIVE ENGINE REBUILD

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides basic theory and practical experience in the disassembly, inspection, reassembly, machine work, reassembly and adjustment of the valve heads, cylinder heads, cylinder block, and related components.

Distance Modality: Hybrid
Prerequisite: AUTO 004 or two (2) years trade experience Associate Degree Applicable

AUTO 045
AUTOMATIC TRANSMISSIONS

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides basic theory, knowledge, and hands-on experience in the operation, diagnostics, servicing, and repair of automatic transmissions and transaxles. It covers the operation and diagnosis of computer controlled automatic transmissions and transaxles.

Distance Modality: Hybrid
Advisory: ENG 003A
Prerequisite: AUTO 004, or two (2) years trade experience
Associate Degree Applicable

AUTO 046
AUTOMOTIVE DIAGNOSTIC EQUIPMENT

2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours

This course provides instruction in the proper operation and use of tune-up related automotive diagnostic equipment. Included are oscilloscopes, exhaust gas analyzers, automotive computer diagnostic testers, and other tune-up related test equipment.

CSU, Associate Degree Applicable

AUTO 060
AUTOMOTIVE HEATING AND AIR CONDITIONING

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course provides theory, training, and hands-on experience in automotive air conditioning, heating, and climate control systems operation, troubleshooting, and repair. The electronic aspects of the system will be employed. This course is based on National Automotive Technician Education Foundation (NATEF) guidelines.

Distance Modality: Hybrid
Prerequisite: AUTO 004, or 1-year verifiable trade experience
Advisory: ENG 003A
Associate Degree Applicable

AUTO 065
MANUAL TRANSMISSIONS AND TRANSAXLES

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course covers the principles of operation and repair of clutches, three, four, and five-speed manual transmissions and transaxles, drive lines and rear axles for rear wheel drive vehicles, and drive trains for front wheel drive vehicles. This course is based on National Automotive Technicians Education Foundations (NATEF).

Prerequisite: AUTO 004 or 2 years verifiable trade experience
Distance Modality: Hybrid
Advisory: ENG 003A
Associate Degree Applicable

AUTO 068
NIASE TEST PREPARATION

.5 Unit
Lecture: .5 hour

This course prepares the student for National Institute for Automotive Service Excellence (NIASE) test: "Automotive Certificate Exam". Topics covered include: brakes, front end, engine repair, engine performance, automatic transmission/transaxle, manual drive train and axles, electrical and heating/air conditioning. Test-taking techniques are also covered.

Prerequisite: Minimum one year experience and/or completion of at least three automotive courses.
Associate Degree Applicable

AUTO 069
SMALL ENGINES

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is the study of the theory and operating principles of small two-cycle and four-cycle engines. Practical work in ignition service, carburetor service, engine disassembly and assembly, valve refacing, reboring, engine block testing and proper adjustments is covered.

Associate Degree Applicable

AUTO 078A,B
ALTERNATIVE FUELS
2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course includes a study of alternative types of fuel that can be used in today's vehicles, such as: electric, solar, ethanol, fuel cells, etc. Students will be provided with some basic knowledge regarding service and maintenance of alternative fuel systems that will be on the market in the near future. The course investigates the process of converting vehicles for the use of alternative fuels and propulsion.

Prerequisite: AUTO 001 or equivalent
Associate Degree Applicable

AUTO 087A-C
B.A.R. CITATION 1
.5 Unit
Lecture: .5 hour

This course meets the requirements for a Bureau of Automotive Repair (BAR) licensed SMOG mechanic who has received a first citation for violation of California State Vehicle Emission Control System inspection and repair laws and regulations.

Prerequisite: AUTO 027-028 or trade experience; possess a SMOG check mechanic's license

AUTO 088A-C
B.A.R. CITATION 2
1 Unit
Lecture: 1 hour

This course meets the requirements for a Bureau of Automotive Repair (BAR) licensed SMOG mechanic who has received a second citation for violations of California State Vehicle Emission Control System inspection and repair laws and regulations.

Prerequisite: AUTO 027-028 or trade experience; possess a SMOG check mechanic's license

AUTO 092
AUTOMOTIVE COLLISION REPAIR, BEGINNING AUTO BODY
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course provides entry-level theory and practical experience in automotive collision repair and refinishing techniques. Students also learn to prepare accurate estimates of damage and repair for auto body work.

Prerequisite: Auto 004 or one (1) year industry experience

AUTO 093
AUTOMOTIVE COLLISION REPAIR, INTERMEDIATE
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course provides intermediate-level theory and practical experience in automotive collision repair and refinishing techniques. Students also learn to prepare accurate estimates of damage and repair for auto body work.

Prerequisite: AUTO 092
Advisory: AUTO 001 or equivalent
Associate Degree Applicable

AUTO 094
AUTOMOTIVE COLLISION REPAIR, ADVANCED
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course provides advanced-level theory and practical experience in automotive collision repair and refinishing techniques. Students also learn to prepare accurate estimates of damage and repair for auto body work.

Prerequisite: AUTO 093
Associate Degree Applicable

BIOLOGY (BI)

BI 001A
GENERAL BIOLOGY — PRINCIPLES
5 Units
Lecture: 4 hours
Laboratory: 3 hours

This course presents a survey of biological principles with a strong emphasis on biochemistry, cell biology, and genetics. Topics include chemistry and origin of life; cellular energy productions and exchanges; cell structures and functions; tools of biotechnology; plant and animal cell division, embryology, tissues, gametogenesis and genetics. This level of biology is primarily designed for students pursuing careers in science, medicine, dentistry, veterinary medicine and other allied health fields requiring a strong foundation in biology. BI 001A is typically followed by BI 001B and/or BI 001C.

Prerequisite: MATH 040
Advisory: BI 004, CH 003 or CH 004, ENG 050
CSU, UC, Associate Degree Applicable

BI 001B
GENERAL BIOLOGY — ZOOLOGY
5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course covers identification, classification, phylogeny, comparative embryology, morphology, physiology, ecology, behavior, etc., at the animal organismic level. Laboratory experiments, dissections, and identification give practical study.

Note: This course meets requirements of science, pre-professional, and all other majors requiring a strong biology foundation, and partially meets the requirement of students needing one year of biology. It also meets the biological sciences general education requirement.

Prerequisite: BI 001A
Advisory: BI 004, CH 003 or CH 004, ENG 050 and MATH 040
CSU, UC, Associate Degree Applicable

BI 001C
GENERAL BIOLOGY — BOTANY
5 Units
Lecture: 4 hours
Laboratory: 3 hours

This course is a survey of biological functions, and includes a broad study of diversity in plant structure, function, and classifications. Emphasis is placed on algae, fungi, flowering plants, and their ecological significance.

Note: The course is designed primarily for biology, science, and pre-professional and all other majors where a strong foundation in biology is required. Partially meets the requirements of students needing one year of biology.

Prerequisite: BI 001A
Advisory: BI 004, CH 003 or CH 004, ENG 050 and MATH 040
CSU, UC, Associate Degree Applicable

BI 004
ELEMENTS OF BIOLOGY
3 Units
Lecture: 3 hours

This course is designed to acquaint non-majors with fundamental concepts and principles of biology and background information in the physical sciences. Topics include: essential life processes such as metabolism, photosynthesis, ecology, evolution, behavior, and the history of biological thought. A coordinated laboratory course (BI 4L) gives practical study.

Note: BI 004 and BI 004L meet the Biological Sciences General Education Requirement, BI 004 and BI 004L do not meet requirements for biological science majors. BI 004 is offered for those individuals with little or no background in the biological sciences.

Distance Modality: Online, Hybrid
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

BI 004L
ELEMENTS OF BIOLOGY LABORATORY
1 Unit
Laboratory: 3 hours

This course provides supplementary laboratory experience for students enrolled in BI 4. Critical practical studies in biological principles are emphasized such as microscopy, cell structure and function, diffusion and osmosis, photosynthesis and cellular respiration, survey of botany and zoology, heredity, molecular and chromosomal genetics, DNA fingerprinting, evolutionary mechanisms, ecological relationships, population growth, and animal behavior. Students are required to complete dissections, laboratory experiments, and problem-based learning assignments.

Note: BI 004 and BI 004L meet the Biological Sciences General Education requirements. BI 004 and BI 004L do not meet the requirements for biological science majors. BI 004L is offered for those individuals with little or no background in the biological sciences.

Note: If BI 004L is taken as a distance education course, an additional lab fee may be required.

Distance Modality: Online, Hybrid
Corequisite: BI 004 or prior completion
Advisory: ENG 003A and MATH 050
CSU, UC, Associate Degree Applicable

BI 010
WOMEN'S HEALTH
3 Units
Lecture: 3 hours

A study of current issues and practices related to women's health. Emphasis is placed on female anatomy and physiology relative to changes which occur in a woman's body from youth to old age and the specific aspects of health and disease related to these changes. This course is designed to provide information to make the student medically and scientifically knowledgeable about women's health issues and to be an "informed consumer" of medical information and practices concerning today's female.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

BI 015
GENERAL MICROBIOLOGY
5 Units
Lecture: 4 hours
Laboratory: 3 hours

This course is a comprehensive study of the microbial world. It is designed to develop an understanding and appreciation of the microorganisms and their relationship to humans and their environment. Knowledge of the principles of microbiology and their practical applications is stressed. Subject matter includes: medical microbiology, microbial physiology, microbial genetics and industrial microbiology. The laboratory experience explores the development of current methods, techniques and skills necessary to culture, propagate and identify microorganisms.

Prerequisite: BI 023
CSU, UC, Associate Degree Applicable

BI 021
ELEMENTARY HUMAN ANATOMY AND PHYSIOLOGY
3 Units
Lecture: 3 hours

This is a course in the structure and functions of human body systems, and fundamental principles of biology demonstrable in human beings.

Note: BI 021 and BI 021L meet the Biological Science General Education requirement and are recommended to those wishing a 'human' approach to satisfying this requirement.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

BI 021L
ELEMENTARY HUMAN ANATOMY AND PHYSIOLOGY LABORATORY
1 Unit
Laboratory: 3 hours

This course is the companion laboratory course to BI 021, offering a practical approach to the structure and functions of human body systems. Practical consideration will also be given to fundamental biological principles demonstrable in human beings. Dissections, experiments, and demonstrations will be employed.

Note: BI 021 and 021L meet the Biological Science General Education requirement and are recommended to those wishing to satisfy this requirement with a 'human' approach.

Corequisite: BI 021 or prior completion
CSU, UC, Associate Degree Applicable

BI 022
HUMAN ANATOMY (CAN BIOL 10)
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course involves both the gross and microscopic anatomical study of tissues and organ systems of the human body. Laboratory study of histology slides, skeletons, cadavers and/or non-human mammals is undertaken. Directed dissections of laboratory specimens are required.

Note: This course is designed for Health Sciences students, and satisfies the Biological Science General Education requirements. It is not recommended for pre-medical or pre-dental students who must take BI 001A and BI 001B.

Prerequisite: ENG 051, RDG 051
Advisory: BI 004
CSU, UC, Associate Degree Applicable

BI 023
HUMAN PHYSIOLOGY

5 Units
Lecture: 4 hours
Laboratory: 3 hours

This course surveys normal and many abnormal human functions involving integumental, skeletal, muscular, cardiovascular, respiratory, digestive, urogenital, sensory, nervous, and endocrine systems.

Note: This course is a required prerequisite for many Health Sciences majors or it may be used to satisfy a General Education Life Science requirement. Pre-medical, pre-dentistry, and pre-veterinary students are advised to take the BI 001A, 001B, and 001C series rather than BI 022 and BI 023.

Prerequisite: CH 003 or CH 004, BI 022
CSU, UC, Associate Degree Applicable

BUSINESS — ACCOUNTING (BUAC)

BUAC 001
ACCOUNTING I

3 Units
Lecture: 3 hours

This course expands upon basic fundamentals of the double entry accrual accounting system. It includes accounting for service and merchandise enterprises with special emphasis on receivables, payables, inventories, plant asset depreciation methods, internal controls, payroll and other sub-systems.

Prerequisite: BUAC 066 or BUAC 065
CSU, UC, Associate Degree Applicable

BUAC 002
ACCOUNTING II

3 Units
Lecture: 3 hours

This course focuses on accounting concepts and principles relating to partnerships, corporations, stock and bond transactions, cash flow, and financial statement analysis. Also emphasized are management uses of accounting data that include financial planning and evaluation, and introduction to managerial accounting.

Prerequisite: BUAC 001
CSU, UC, Associate Degree Applicable

BUAC 003
GOVERNMENTAL ACCOUNTING

3 Units
Lecture: 3 hours

This course focuses on principles of fund accounting for governmental units including problems of budgeting, appropriations, accounting for revenues, expenditures, and encumbrances.

Prerequisite: BUAC 066
CSU, Associate Degree Applicable

BUAC 004
TAX ACCOUNTING I - INDIVIDUALS

3 Units
Lecture: 3 hours

This course is designed to provide students with tax information for both personal and career interests. Students learn tax information with the current laws and regulations available for preparation of personal tax returns and tax returns of others. Tax planning issues for the current and later years are considered.

Distance Modality: Hybrid, Online
Prerequisite: BUAC 066
CSU, Associate Degree Applicable

BUAC 005
TAX ACCOUNTING II - BUSINESS ENTITIES

3 Units
Lecture: 3 hours

This course is designed to provide students with tax information for both personal and professional use. Students learn the latest tax regulations that will allow them to prepare tax returns for their own businesses as well as other businesses and corporations. Tax planning issues for current and later tax years are also considered.

Distance Modality: Hybrid, Online
Prerequisite: BUAC 066
CSU, Associate Degree Applicable

BUAC 006
PRINCIPLES OF MANAGERIAL ACCOUNTING

3 Units
Lecture: 3 hours

This course examines economics models used by managers to use accounting information to plan, control activities, assess outcomes, and make decisions that are data defensible. Topics include budgeting, relevant cost for decision-making and capital investing.

Prerequisite: BUAC 001
CSU, UC, Associate Degree Applicable

BUAC 010
COMPUTER ACCOUNTING

3 Units
Lecture: 2.5 hour
Laboratory: 1.5 hours

This course covers introductory material in the processing of accounting data on the computer. Students learn to record and process transactions in the major accounting systems such as; general ledger, accounts receivable, accounts payable, depreciation, and payroll. Course work prepares students for actual situations using automated accounting software. (Also listed as, and equivalent to CIS 010.)

Prerequisite: BUAC 066
CSU, Associate Degree Applicable

BUAC 064
INTRODUCTION TO ACCOUNTING IA

3 Units
Lecture: 3 hours

This non-transfer course covers the beginning concepts of double-entry bookkeeping practice upon which more advanced work in other accounting courses is based. Topics include the basic accounting equation, uses of journals and ledgers, and adjusting/closing entries. Completion of both BUAC 064 and BUAC 065 is equivalent to BUAC 066.

Prerequisite: ENG 051 and MATH 057
Associate Degree Applicable

BUAC 065
INTRODUCTION TO ACCOUNTING IB

3 Units
Lecture: 3 hours

This non-transfer course continues coverage of the essential elements of double-entry bookkeeping practice upon which more advanced work in other accounting courses is based. Students build on knowledge obtained from BUAC 064 which included, the accounting equation, uses of journals and ledgers, and adjusting/closing entries. This course emphasizes various accounting methods, cash accounting, bank account reconciliation, payroll, and financial statement preparation. Completion of both BUAC 064 and BUAC 065 is equivalent to BUAC 066.

Prerequisite: BUAC 064
Associate Degree Applicable

BUAC 066
INTRODUCTION TO ACCOUNTING I
3 Units
Lecture: 3 hours

This non-transfer course covers the essential elements of double-entry bookkeeping practice upon which more advanced work in other accounting courses is based. Topics include the basic accounting equation, uses of journals and ledgers, preparation of financial statements, adjusting and closing entries, bank account reconciliation, and payroll.

Prerequisite: ENG 051 and MATH 057
Associate Degree Applicable

BUSINESS — FINANCE (BUFI)

BUFI 001
PRINCIPLES OF FINANCIAL STATEMENT ANALYSIS
3 Units
Lecture: 3 hours

This course provides an overview of financial tools, issues, and problems involved in evaluating the ongoing performance of contemporary public corporations and non-profit organizations. It provides students with an understanding of the rules, rule-making, and regulatory agencies that govern the content of published performance reports.

CSU, Associate Degree Applicable

BUFI 012
PERSONAL FINANCE
3 Units
Lecture: 3 hours

This course provides students with an understanding of economic and financial environment within which they must make their economic and financial decisions. It prepares students to make more informed decisions about setting their career and financial goals, managing their budget, taxes and investments, protecting their assets against risk, and preparing for retirement.

Advisory: ENG 050 and MATH 057
CSU, Associate Degree Applicable

BUFI 013
INVESTMENT OPPORTUNITIES
3 Units
Lecture: 3 hours

The course provides students with an understanding of the importance of investment in their personal finances as well as various investment opportunities available to them. It presents the features of different types of stocks, corporate bonds, government securities, mutual funds, options, futures, and real estate investments. It also offers students a set of tools and criteria for evaluating these investment instruments in light of their own financial conditions and objectives. Students may choose the credit/no credit grading option.

CSU, Associate Degree Applicable

BUSINESS — MANAGEMENT (BUMA)

BUMA 001
PRINCIPLES OF MANAGEMENT
3 Units
Lecture: 3 hours

This course examines the history of organizational design, managerial processes, and motivational theories, in the context of current management problems. It includes a study of the role of managers in technologically and culturally diverse environments including the functions of planning, organizing, leading and controlling. The student is provided an opportunity to gain contemporary knowledge in management design and to improve managerial insights, skills and abilities.

Advisory: Eligibility for ENG 051
CSU, Associate Degree Applicable

BUMA 010
INTRODUCTION TO BUSINESS
3 Units
Lecture: 3 hours

This survey course studies the form, structure, objectives, environment, and ethics of contemporary American business. The course emphasizes management, human resources, marketing, operational and financial activities of business organizations. This course is recommended for students who wish to explore a career in business.

Distance Modality: Online, Hybrid
Prerequisite: RDG 051 and ENG 051
CSU, UC, Associate Degree Applicable

BUMA 020A
BUSINESS LAW
3 Units
Lecture: 3 hours

This course is a study of the social forces and the law, the law of contracts, agency and employment, personal property and bailments, business torts and crimes, sales law, labor law and government regulation of business.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

BUMA 027
MARKETING
3 Units
Lecture: 3 hours

This course is the study of market structures, channels of distribution, pricing and price policy, and market research. The course emphasizes the relationship of human behavior and culture to marketing activities. The student participates in individual and class projects designed to reinforce of basic marketing theory and concepts.

Advisory: ENG 050
CSU, Associate Degree Applicable

BUMA 028
SMALL BUSINESS: DEVELOPMENT AND MANAGEMENT
3 Units
Lecture: 3 hours

This course is designed for the prospective as well as the current small business owner/manager. The curriculum is centered on an array of structural, relationship and process elements such as financial and physical assets, leadership/management issues, human resource functions, planning, and marketing. These elements are developed in the course through a diagnosis and prescription process and culminate in the writing of a comprehensive business plan.

Advisory: ENG 050 and MATH 057
CSU, Associate Degree Applicable

BUSINESS — REAL ESTATE (BURE)

BURE 081
PRINCIPLES OF REAL ESTATE

3 Units
Lecture: 3 hours

This course is a study of principles of Real Estate as applied to the following areas: land economics; interests in the uses of land; land transfers; buying and selling of real estate; contracts, liens and encumbrances; real estate finance; and preparation of the student for the professional goal of salesperson.

CSU, Associate Degree Applicable

BURE 082
REAL ESTATE ECONOMICS

3 Units
Lecture: 3 hours

This course is a study of economic foundations of real estate with particular emphasis upon the patterns of land use, urban, and rural appreciation of values in the community and in the State of California. This is one of the required courses to take the California Real Estate Broker's exam.

Advisory: BURE 081
Associate Degree Applicable

BURE 083A
REAL ESTATE PRACTICE

3 Units
Lecture: 3 hours

This course is a study of real estate as a career, the practical application of the real estate cycle, and orientation into specialized selling. The course emphasizes the role and functions of the broker and salesperson in the real estate office; the application of advertising techniques, listings, and valuations; locating buyers; property management; and leasing. Students explore the importance of public relations, personnel policies, and professional ethics.

CSU, Associate Degree Applicable

BURE 084
LEGAL ASPECTS OF REAL ESTATE

3 Units
Lecture: 3 hours

This course considers how California laws relate to real estate property acquisitions, transfer, and ownership interest in real property. It investigates types of tenancy, estate and federal courts, land contracts, liens, restrictions, landlords and tenants, agency, probate, and taxes. Students will learn licensing requirements of salespeople and brokers, and laws relating to the real estate profession. This is one of the required courses to take the California Real Estate Broker's exam.

Advisory: BURE 081
Associate Degree Applicable

BURE 085
REAL ESTATE FINANCE

3 Units
Lecture: 3 hours

This course studies the sources and supply of mortgage funds, construction loans and permanent financing for residential and income properties. It emphasizes procedures for Federal Housing Administration (FHA), California Veterans (Cal-Vet) and Veterans' Administration (VA) loans, interest rates, terms, mortgages, and mechanic's liens. This is one of the required courses to take the California Real Estate Broker's exam.

Advisory: BURE 081
CSU, Associate Degree Applicable

BURE 086
PRINCIPLES OF APPRAISING

3 Units
Lecture: 3 hours

This course studies of principles, methods and techniques for the appraisal for single and multiple dwellings, commercial-business properties, and farm properties. The course emphasizes the determination of real estate values for loan and insurance purposes and the implications for brokers and salespeople.

Associate Degree Applicable

BUSINESS — SUPERVISION AND MANAGEMENT (BUSM)

BUSM 092
PSYCHOLOGY FOR SUPERVISORS

2 Units
Lecture: 2 hours

This course is the study of the role of the supervisor in understanding the people with whom he/she works; with emphasis on psychological processes, perceptions, learning, emotions, attitudes, and personalities.

Associate Degree Applicable

CHEMISTRY (CH)

CH 001A
GENERAL CHEMISTRY

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This is the first course of a two-semester sequence covering the basic principles and concepts of chemistry, with emphasis on chemical calculations. Inorganic chemistry is stressed and the material includes a discussion of atomic structure, chemical bonding, molecules, reaction types, states of matter and the properties of solutions. The laboratory part of the course complements the lectures and includes qualitative analysis.

Note: This course is designed for pre-professional, science, and engineering major transfer students.

Prerequisite: CH 003 or CH 004 or one-year high school chemistry and MATH 010
CSU, UC, Associate Degree Applicable

CH 001B
GENERAL CHEMISTRY

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This is the second semester course of a two-semester sequence covering the basic principles and concepts of chemistry, with emphasis on chemical calculations. Inorganic chemistry is stressed, and the material includes a discussion of thermodynamics, reactive kinetics, equilibria, electro-chemistry, and a detailed study of the chemistry of selected elements. There is a brief introduction to organic, biological, and nuclear chemistry. The laboratory part of the course complements the lectures, and includes half a semester of ion properties and qualitative analysis.

Note: This course is designed for pre-professional, science, and engineering major transfer students.

Prerequisite: CH 001A with a grade of "C" or better
CSU, UC, Associate Degree Applicable

CH 003
INTRODUCTORY GENERAL CHEMISTRY

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is the study of the principles of inorganic chemistry. Instruction is given in calculations, atoms, compounds, nomenclature, reaction, composition, stoichiometry, modern atomic theory, bonding and acids & bases. Laboratory is a hands-on experience stressing manipulation, procedure, data and outcome calculations.

Advisory: ENG 051 and MATH 050
CSU, UC, Associate Degree Applicable

CH 004
FUNDAMENTALS OF CHEMISTRY

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is a survey of basic principles of inorganic, organic, and bio-organic chemistry presented on a level for the general student.

Note: This course satisfies the chemistry requirement for RN students and is transferable as a physical science with laboratory.

Prerequisite: ENG 051 and MATH 050
CSU, UC, Associate Degree Applicable

CH 005
BIO-ORGANIC CHEMISTRY

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is a survey of organic chemistry and biochemistry with an emphasis on the health sciences. It covers the major functional groups of organic compounds. The biologically active macromolecules and their components are discussed. Bioenergetics and metabolism are a substantial part of this course. The course is intended for health sciences students in dental hygiene, physician's assistant, and related programs.

Note: This course is suitable for Health Sciences students who are required to take one year of chemistry. As such, it is taken in sequence after CH 003 or CH 004.

Prerequisite: CH 001A
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

CH 010A
ORGANIC CHEMISTRY

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course is the first of a two-semester sequence covering the basic principles and concepts of organic chemistry. An in-depth study is made of the bonding of carbon, stereochemistry, and the reactivity of alkanes, alkenes and alkynes. Addition, substitution and radical reactions are discussed. Alcohols, ethers, haloalkanes and conjugated unsaturated systems are analyzed. The course is designed for chemistry, biology and pre-professional majors.

Prerequisite: CH 001B with a grade of "C" or better
CSU, UC, Associate Degree Applicable

CH 010B
ORGANIC CHEMISTRY

5 Units
Lecture: 3 hours
Laboratory: 6 hours

This course is the second of a two-semester sequence covering the basic principles and concepts of organic chemistry. Spectrophotometry is covered. An introduction is made to biochemical compounds. The course is designed for chemistry, biology and pre-professional majors.

Prerequisite: CH 010A with a grade of "C" or better
Advisory: MATH 050
CSU, UC, Associate Degree Applicable

COMPUTER INFORMATION SYSTEMS (CIS)

CIS 010
COMPUTER ACCOUNTING

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course covers introductory material in the processing of accounting data on the computer. Students learn to record and process transactions in the major accounting systems such as; general ledger, accounts receivable, accounts payable, depreciation, and payroll. Course work prepares students for actual situations using automated accounting software. (Also listed as, and equivalent to BUAC 010.)

Prerequisite: BUAC066
CSU, Associate Degree Applicable

CIS 030
PLANNING AND CREATING AN E-BUSINESS

3 Units
Lecture: 3 hours

Provides students who have no previous E-business knowledge or experience with practical ideas on planning and creating an E-business. This course will place emphasis on the key business elements of planning and starting an E-business from the ground up. Numerous real-world E-business examples are discussed. This practical, entrepreneurial guide to getting an online business off the ground begins with idea generation and progresses through business plans to the nuts and bolts of creating and maintaining an E-business site.

Distance Modality: Hybrid, Online
Prerequisite: CIS 070B
Associate Degree Applicable

CIS 050
COMPUTER KEYBOARDING I

2 Units
Lecture: 1 hour
Laboratory: 3 hours

This course is designed for students who need to master computer keyboarding skills. Students develop basic alpha/numeric keyboarding and touch typing skills, and increase their ability to communicate information. No previous electronic keyboard or computer experience is necessary.

Associate Degree Applicable

CIS 060
PRESENTATIONS WITH POWERPOINT

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course provides students with a business scenario approach to creating professional PowerPoint presentations. Emphasis is placed on planning, developing and delivering PowerPoint presentations. Students will learn to determine the purpose, outcome, audience needs, and selection of appropriate media for creating a business presentation. A major component of this course is to teach the basic through advanced features of PowerPoint required by employers. This course will prepare the student to take the Microsoft Office User Specialist (MOUS) Certification at the Expert level.

Distance Modality: Online, Hybrid
Advisory: CIS 070A
Associate Degree Applicable

CIS 062
BEGINNING DREAMWEAVER

1.5 Units
Lecture: 1.35 hour
Laboratory: .45 hours

This is a hands-on course that focuses on learning Dreamweaver. Dreamweaver is a high-end web authoring tool used to create professional websites. Previous knowledge of HTML, site structure, and site uploading to an Internet Service Provider (ISP) is essential. The emphasis will be on learning the beginning skills such as tools, palettes, and commands. Topics include new site creation; editing and maintenance of an existing site; image, text and PDF insertion; and using tables and layers.

Distance Modality: Online, Hybrid
Prerequisite: CIS 082C
Advisory: ENG 003A
Associate Degree Applicable

CIS 063
INTERMEDIATE DREAMWEAVER

1.5 Units
Lecture: 1.35 hour
Laboratory: .45 hours

This is an intermediate hands-on course that focuses on using Macromedia Dreamweaver to create professional websites. The emphasis will be on learning the intermediate skills of the Dreamweaver program, such as tracing, cascading style sheets, templates, libraries, frames, forms, and behaviors.

Distance Modality: Online, Hybrid
Prerequisite: CIS 062
Associate Degree Applicable

CIS 064
WEB DATABASE DESIGN WITH DREAMWEAVER

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This is an introduction to creation and development of simple database-driven websites. Students will create dynamically driven web pages using databases created with Microsoft Access imported into Macromedia Dreamweaver. Students will examine various back-end programming models, use activities will culminate with the creation of e-commerce and e-learning websites.

Prerequisite: CIS 063
Advisory: Eligibility for ENG 003A
Associate Degree Applicable

CIS 070A
COMPUTER BUSINESS APPLICATIONS FOR WINDOWS

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course is designed for students with no previous computer experience who want to learn how to use an IBM-compatible personal computer with an emphasis on Windows techniques. Using the Windows/ graphical user interface approach, students develop basic skills in four applications: word processing, spreadsheets, database management, and presentation software. Students are also introduced to the INTERNET and Geographic Information Systems (GIS) concepts.

CSU, UC, Associate Degree Applicable

CIS 070B
WINDOWS AND INTERNET

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course examines the fundamental concepts of the Windows operating system and the Internet. Students learn to install, configure, and use Windows and Internet ability hardware and software for maximum productivity and efficiency. Emphasis is placed on the ability to find, save, and retrieve information.

Advisory: CS 097A-D, CS 098A-D, or CS 099A-D
Associate Degree Applicable

CIS 072D
EXCEL I

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course provides basic and practical applications using Excel. Students receive instruction and computer experience using electronic spreadsheets to solve common numerical and accounting-based problems.

Distance Modality: Online, Hybrid
Prerequisite: CIS 070A
Associate Degree Applicable

CIS 073C
ACCESS I

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course provides beginning and intermediate concepts and practical applications in database management using Windows. Students receive instruction and experience needed to design, create, customize, organize, extract, and store information using Access.

Distance Modality: Online, Hybrid
Prerequisite: CIS 070A
Associate Degree Applicable

CIS 074
EXCEL II

3 Units
Lecture: 2.7 hours
Laboratory: .9 hours

This is an advanced Excel for Windows course. Students create comprehensive business and technical spreadsheet systems using advanced Excel techniques. Topics covered include macros, sub-macros, auto-executable macros and the macro command language; linking or combining multiple worksheets; table and table lookup operations; financial and statistical applications, and advanced data operation, including linear regression, randomization and simulation. (Also listed as, and equivalent to CS 071D.)

Distance Modality: Online, Hybrid
Prerequisite: CIS 072D
Associate Degree Applicable

CIS 076B
WORD I

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course introduces students to beginning and intermediate microcomputer skills through word processing concepts and procedures in the Word for Windows program. Applications include communicating with the mouse and the keyboard, editing, revising, and printing documents. Document production includes basic business communications, reports, tables, formatting, and other basic word processing features.

Distance Modality: Online, Hybrid
Prerequisite: CIS 070A
Associate Degree Applicable

CIS 078B
WORD II

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course provides advanced word processing applications using Word for Windows. Emphasis is placed on working with features such as macros, fonts and graphics, math functions, file management, sort and select features, style sheets, and an introduction to desktop publishing techniques.

Distance Modality: Online, Hybrid
Prerequisite: CIS 076B
Associate Degree Applicable

CIS 080
ACCESS II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an advanced Access for Windows programming course. Students design, write, debug fully integrated Database Management Systems using the Access programming language. Topics covered include: Access program structure, syntax, and command set; use of multiple, interrelated files; database file design; and advanced use of custom screen displays and formatted reports. Also listed as, and equivalent to CS 071E.

Prerequisite: CIS 073C

CIS 082C
WEB PUBLISHING I

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course teaches students to format Web pages using Hypertext Markup Language (HTML) emphasizing the development of effective pages. Students learn to incorporate text, graphics, audio files, animation, and three-dimensional effects into their Web pages.

Distance Modality: Online, Hybrid
Advisory: CIS 070B, ART 003A or ART 040
CSU, Associate Degree Applicable

CIS 082E
ADOBE PHOTOSHOP FOR PRINT AND WEB DESIGN

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course covers the beginning and intermediate skills of image production and manipulation in Adobe Photoshop for graphics users of all kinds. Topics include using the toolbox, painting and editing, selection fundamentals, working with type, working with scanned images, masks, filters, layers, channels, paths, and applying strokes and fills. This course also examines digital water marking, special effects with type, and plug-in filters. (NOTE: This course does not cover the principles of art, design, or professional graphics production work.)

Advisory: Completion of CIS 070B is strongly recommended. Eligible for ENG 003A

CIS 082F
ADOBE ILLUSTRATOR FOR PRINT AND WEB DESIGN I

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course is designed for students with little or no knowledge of illustration programs. The course will cover the basics of computer illustration and its use in print and web-based media. Students will be introduced to the tools available in Adobe Illustrator, how to use them, how to work with objects, clip art and bitmaps (web-graphics), and text color. This course studies the creation, modification and simple formatting of vector objects and type. (NOTE: Successful completion of this course and CIS 083F prepares students for the Adobe Illustrator Certified Expert exam).

Advisory: Completion of CIS 070B and eligible for ENG 003A

CIS 082G
ADOBE INDESIGN I

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course is an introduction to desktop publishing using Adobe InDesign. Students will create graphically rich layouts with formatted text to create camera-ready, near typeset quality reports, fliers, business forms, brochures, and newsletters for print and conversion to PDF (Portable Document Format).

Advisory: Completion of CIS 070B and eligible for ENG 003A

CIS 082H
WEB-BASED ANIMATION WITH FLASH

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

An introduction to the use and implementation of Web-based animation tools. Students use Adobe Flash to create basic vector-based animations. Students examine the concepts that make a quality interactive animation, complete a thorough exploration of the tools, introduce and utilize basic ActionScripting, and produce animations.

Advisory: Completion of CIS 070B and eligible for ENG 003A

CIS 082I
INTRODUCTION TO ADOBE ACROBAT

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course teaches students how to create, optimize, and use PDF (Portable Document Format) to publish, share and distribute electronic documents. Adobe Exchange, Reader, PDF Writer, Distiller, and Catalog will be introduced.

Advisory: Completion of CIS 070B or previous computer experience, and eligible for ENG 003A

CIS 083C
WEB PUBLISHING II/JAVA SCRIPT

3 Units
Lecture: 2.7 hours
Laboratory: .9 hour

This course teaches students to incorporate interactive Java Script elements in Web pages. Students learn how to understand and use the Document Object Model; event handlers, variables and functions; browser detection; forms validation; text and image rollovers; and common programming elements, including arrays, loops, and logical operations.

Distance Modality: Online, Hybrid
Prerequisite: CIS 082C
CSU, Associate Degree Applicable

CIS 083E
ADOBE PHOTOSHOP ADVANCED CONCEPTS FOR PRINT AND WEB DESIGN

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course will show students how to create web graphics so their work stands out from the crowd. Students' confidence will be boosted by enhancing their creativity and technical skills. This course includes in-depth coverage of must-have skills such as creating eye catching effects, using color creatively, working with masks, creating custom shapes for interfaces and navigational panels, working with transparency, working with ImageReady, and much more.

Successful completion of this course and CIS 082E prepares students for the Adobe Photoshop Certified Expert exam.

Prerequisite: CIS 082E

CIS 083F
ADOBE ILLUSTRATOR FOR PRINT AND WEB DESIGN II

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course provides further exploration of Adobe Illustrator graphics. Topics include: importing/exporting graphics; formatting text and objects; live shapes; and a complete study of Illustrator tools. (NOTE: Successful completion of this course and CIS 082F prepares students for the Adobe Illustrator Certified Expert exam).

Prerequisite: CIS 082F

CIS 083G
ADOBE INDESIGN II

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course is an advanced study of the principles and applications of desktop publishing using Adobe InDesign. Advanced techniques in layout, text formatting, and frames are applied to books, tables, booklets, and PDF (Portable Document Format) files.

Prerequisite: CIS 082G

CIS 083J
ADOBE WORKFLOW PROJECTS

3 Units
Lecture: 2.5 hours
Laboratory: 1.5 hours

This course is an advanced study of workflow techniques based on Adobe InDesign projects. Using all programs in the Adobe Creative Suite, the entire cycle of document production, management, and review will be explored.

Prerequisite: CIS 082E, CIS 082F, CIS 082G, CIS 082H, and CIS 082I

CIS 084A
NEW MEDIA I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

Students in this course use the computer to create multimedia presentations that synthesize photography, graphics, video, sound, and animation as well as making traditional and web-based interactive presentations.

Prerequisite: CIS 082D
Advisory: ART 040
CSU, Associate Degree Applicable

CIS 084C
WEB PUBLISHING III/PERL

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course teaches students the fundamental knowledge and skills needed to create server-side, web-based applications using the Perl Language. Applications studied include form processing, counters, searching, chat and bulletin board systems.

Distance Modality: Online, Hybrid
Prerequisite: CIS 083C
Advisory: CIS 070B
CSU, Associate Degree Applicable

CIS 086
WEB PAGE CONTENT DEVELOPMENT

2 Units
Lecture: 1 hours
Laboratory: 3 hours

This is a practical hands-on course in which students learn how to create simple web pages for clients. Topics include: steps involved in planning and producing web pages, modifying web templates, storyboard and timeline creation, content development, communication strategies, client relations, production techniques, and web site maintenance. Web authoring and maintenance tools will be explored. Students will work in teams to develop or modify web sites for customers provided by their instructor.

Prerequisite: CIS 083C or CIS 064
Advisory: Eligible for ENG 003A

COMPUTER SCIENCE (CS)

CS 001
MICROCOMPUTER SUPPORT SPECIALIST - A+ TRAINING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course examines the fundamentals of how an IBM microcomputer clone is assembled, how software is installed, and how it operates, with emphasis on maintenance, repair, and basic theory. The level of study is designed to prepare the student with the knowledge necessary to pass the Computing Technology Industry Association (CompTIA) A+ Certification Test. Passing the CompTIA A+ test will earn the student an A+ certification identification card and a CompTIA A+ Certification Certificate.

Advisory: ENG 050, CS 073, and CIS 070A
Associate Degree Applicable

CS 002A
ETHERNET FUNDAMENTALS, TOPOLOGY, INTERNET PROTOCOL ADDRESSING, AND WIRING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides students with classroom and laboratory experience in the fundamentals of current and emerging networking technology. Topics covered include network topology, cabling, electrical considerations, the open systems interconnection (OSI) model, Internet protocol (IP) addressing, bridges, switches, hubs, and routers. This is the first course in a four-course Cisco Certified Network Associate (CCNA) preparation sequence.

Advisory: CS 073, CIS 070A, and CS 001

CS 002B
OPEN SYSTEMS INTERCONNECTION, ROUTING, TRANSMISSION CONTROL PROTOCOL/INTERNET PROTOCOL, ROUTER CONFIGURATION

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course is the second in a series of four courses designed to prepare the student to test for the Cisco Certified Network Associate (CCNA™) certification. CCNA certification indicates a foundation in and apprentice knowledge of networking for the small office/home office market. Topics covered include router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting.

Prerequisite: Pass CS 002A with a grade of "C" or better

CS 002C
LOCAL AREA NETWORKING DESIGN, SWITCHING AND ADDRESSING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course teaches students the skills they will need to configure, design, build and maintain small to medium size networks. These skills are mandated as core requirements necessary to enter the work force as a computer networking associate. This is the third course in a four-course Cisco Certified Network Associate (CCNA) preparation sequence.

Prerequisite: CS 2B with a grade of "C" or better

CS 002D
WIDE AREA NETWORKING DESIGN SWITCHING AND ADDRESSING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course teaches students the skills they will need to configure, design, build and maintain medium to large size networks. These skills are mandated as core requirements necessary to enter the work force as a computer network associate. This is the fourth course in a four-course Cisco Certified Network Associate (CCNA) preparation sequence.

Prerequisite: CS 002C with a grade of "C" or better

CS 010
MICROSOFT WINDOWS NETWORK AND OPERATING SYSTEM ESSENTIALS

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course teaches students the current Microsoft Windows operating system and the networking technologies it supports. Students will be able to describe the principal features of the operating systems and the basics of networking as presented by the official Microsoft curriculum and course materials. This is one of four (4) core courses in the Microsoft Certified Systems Engineer (MCSE) preparation sequence. Passing the associated Microsoft certification exam earns the student a Microsoft Certified Professional (MCP) Certification.

Advisory: CS 073, CIS 070A, and CS 001

CS 011
MICROSOFT WINDOWS OPERATING SYSTEM AND SERVER

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides students with the knowledge and skills necessary to install and configure Microsoft Windows operating system on stand-alone computers and on client computers that are part of a work group or a domain. In addition, this course provides the skills and knowledge necessary to install and configure a Microsoft Server providing file, print, and terminal management. This is one of four (4) core courses in the Microsoft Certified Systems Engineer (MCSE) preparation sequence. Passing the associated Microsoft certification exam earns the student a Microsoft Certified Professional (MCP) Certification.

Advisory: CS 001, CS 010, CS 073 and CIS 070A

CS 012
MANAGING A MICROSOFT WINDOWS 2000 NETWORK ENVIRONMENT

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides students with the knowledge and skills necessary to administer and support a Windows 2000 network. It will also prepare the student for the Microsoft Certified Professional (MCP) exam by covering the official Microsoft study guide in class. Students will have the opportunity to work at their own pace through the lessons and be guided through hands-on exercises to gain practical experience managing network infrastructures, services and resources. Students build these real-world system administration skills, they will be mastering the knowledge that prepares them for MCP Exam 70-218, a core requirement for the Microsoft Certified Systems Administrator (MCSA) certification and an elective for the Microsoft Certified Systems Engineer (MCSE) certification.

Advisory: CS 073, CS 001, CS 010, and CIS 070A
Associate Degree Applicable

CS 013
MICROSOFT WINDOWS 2000 PROFESSIONAL

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides students with the knowledge and skills necessary to install, configure and support Windows 2000 Professional. This course will also prepare the student for the Microsoft Certified Systems Engineer (MCSE) or the Microsoft Certified Systems Administrator (MCSA) certification. Students will supplement in-depth lectures with hands-on lab assignments all designed to prepare them for the core MCSE/MCSA Exam 70-210. Particular emphasis will be placed on providing the student essential skills to install, maintain, and administer Windows 2000 Professional.

Advisory: CS 001, CS 010, CS 073 and CIS 070A

CS 014
MICROSOFT WINDOWS 2000 ACTIVE DIRECTORY

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides students with the knowledge and skills necessary to set up and support Windows 2000 Active Directory services. The student will be provided with extensive hands-on laboratory assignments that will supplement in-depth lectures. This course is designed to continue preparation for the Microsoft Certified Systems Engineer core exam, Exam 70-217.

Advisory: CS 001, CS 010, CS 073 and CIS 070A

CS 071D
EXCEL II

3 Units
Lecture: 2.7 hours
Laboratory: .3 hours

This is an advanced Excel for Windows course. Students create comprehensive business and technical spreadsheet systems using advanced Excel techniques. Topics covered include macros, sub-macros, auto-executable macros and the macro command language; linking or combining multiple worksheets; table and table lookup operations; financial and statistical applications; and advanced data operation, including linear regression, randomization, and simulation. (Also listed as, and equivalent to CIS 074.)

Distance Modality: Online, Hybrid
Prerequisite: CIS 072D
Associate Degree Applicable

CS 071E
ACCESS II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an advanced Access for Windows programming course. Students design, write, and debug fully integrated data base management systems using the Access programming language. Topics covered include: Access program structure; syntax and command set; use of multiple, interrelated files; database file design; and advanced use of custom screen displays and formatted reports. (Also listed as, and equivalent to CIS 080.)

Prerequisite: CIS 073C
Associate Degree Applicable

CS 073
INTRODUCTION TO COMPUTER SCIENCE

3 Units
Lecture: 3 hours

This is an introductory course in computer concepts and terminology. Topics covered include: historical development of computers; hardware and software definitions and terminology; categories of system software and application software including word processing, electronic spreadsheets, and database management; machine language, assembler language, and high-level programming languages; the systems development process; careers in data processing; and legal, moral, and ethical issues associated with computers.

Distance Modality: Online
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

CS 080
SYSTEMS ANALYSIS AND DESIGN

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides an overview of the systems development process. Students participate in a semester-long project in which they take a systems design problem from formulation to implementation. Topics covered include: defining the problem; obtaining user requirements; hardware and software selection; system implementation and maintenance; training and development considerations; and formal documentation procedures.

Prerequisite: CS 073 and CS 086
CSU, Associate Degree Applicable

CS 086
VISUAL BASIC PROGRAMMING I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an introductory course in computer programming concepts. Students design, write, and debug programs using the principles of structured programming. Topics covered include: programming language structure and syntax; algorithm development, logic and design considerations and program development tools; error handling and debugging; functions, subprograms and parameter passing; conditional and relational operators, selection and looping structures; array processing; sequential and random file access; and an introduction to object oriented programming.

Prerequisite: CIS 070A
CSU, UC, Associate Degree Applicable

CS 086A
VISUAL BASIC PROGRAMMING II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an advanced course in Visual Basic programming. Students design, write, and debug Visual Basic programs using structured programming concepts. Topics covered include: graphics and animation; interfacing with windows; keyboard and screen control; recursion; object linking and embedding (OLE), dynamic data exchanges (DDE), and dynamic linked libraries (DLL); linking to C language programs; and incorporating sound and multimedia.

Distance Modality: Online
Prerequisite: CS 086
CSU, UC, Associate Degree Applicable

CS 087
ASSEMBLER LANGUAGE PROGRAMMING

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This is an introductory course in assembler language programming. Students design, write, and debug assembler language programs using structured programming concepts. Topics covered include: decimal, binary, and hexadecimal numbering systems; personal computer architecture; memory, addresses and registers; assembler directives; subroutines and the stack; interrupts; string functions; command line parameters; external subroutines, segments, groups, and macros.

Prerequisite: CS 073 and CS 086
CSU, UC, Associate Degree Applicable

CS 088
JAVA PROGRAMMING
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course focuses on application development using Java. Proper syntax and operating procedures are covered, along with design and programming techniques for object-oriented programs in Java. Additional topics include Applet Programming in Java, exception handling, graphics, font, colors, multithreading, streams, and native methods and libraries.

Prerequisite: CS 086
CSU, UC, Associate Degree Applicable

CS 089
C++ PROGRAMMING I
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an introductory course in C++ programming. Students design, write, and debug C++ programs using structured programming concepts. Topics covered include: C++ structure and syntax; algorithm development; fundamental data types; functions and parameter passing; arrays and addresses; conditional and relational operators; space and time scope of variables; sequential and random access file processing; command line arguments; string manipulation; objects, classes and data abstraction; inheritance, reusability, polymorphism, and overloading.

Prerequisite: CS 073 and CS 086
CSU, UC, Associate Degree Applicable

CS 089A
C++ PROGRAMMING II
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This is an advanced course in C++ programming. Students design, write, and debug C++ programs using structured programming concepts. Topics covered include: pointers; linked lists, unions and data structures; bit operations, user-defined data types; recursion; incorporation of assembly language subroutines; and advanced graphical and animation techniques.

Online Modality: Online
Prerequisite: CS 089
CSU, UC, Associate Degree Applicable

CS 097A-D
MICROCOMPUTER APPLICATIONS LAB
.5 Unit
Laboratory: 1.5 hours

Microcomputer Applications Lab is an open entry/open exit environment designed to develop microcomputer skills for students in all segments of the college community. Emphasis will be on the one-to-one tutorial approach, with time devoted to completing lab projects assigned in computer-related courses. This is a credit/no credit graded course.

Corequisite: Concurrent enrollment in any CS or CIS course

CS 098A-D
MICROCOMPUTER APPLICATIONS LAB
1 Unit
Laboratory: 3 hours

Microcomputer Applications Lab is an open entry/open exit environment designed to develop microcomputer skills for students in all segments of the college community. Emphasis is on the one-to-one tutorial approach, with time devoted to completing lab projects assigned in computer-related courses. This is a credit/no credit graded course.

Corequisite: Concurrent enrollment in any CS or CIS course, hybrid/online class.

CS 099A-D
MICROCOMPUTER APPLICATIONS LAB
2 Units
Laboratory: 6 hours

Microcomputer Applications Lab is an open/entry exit environment designed to develop microcomputer skills for students in all segments of the college community. Emphasis is on the one-to-one tutorial approach, with time devoted to completing lab projects assigned in computer-related courses. This is a credit/no credit graded course.

Corequisite: Concurrent enrollment in any CS or CIS course

DEVELOPMENTAL EDUCATION (DE)

DE 300A
BASIC COLLEGE MATHEMATICS
Units: 0

This noncredit course helps students acquire basic math skill competency and prepares them to succeed in college level courses. Topics include: operations with whole numbers; whole number exponents; decimals; fractions; and integers. Other topics are: ratios and proportions; percent; the order of operations; basic equation solving; the metric system including conversion of units; conversion of units; elementary geometry concepts such as perimeter, area, and volume; and basic algebraic problem solving, including square roots to solve simple right triangle problems using the Pythagorean Theorem.

DE 300B
LANGUAGE ARTS
Units: 0

This non-credit Language Arts course is designed to improve students' receptive and expressive skills (reading and writing) to prepare them to be successful in college-level courses. Writing instruction includes usage, sentence formation, paragraph development, capitalization, punctuation, spelling, and writing conventions. Reading instruction includes using context clues, recalling information, interpreting graphic information, comprehension, and analysis of reading passages.

DE 301
STUDENT SUCCESS CENTER ORIENTATION
Units: 0

Students wishing to earn their high school diplomas, prepare for the GED, or refresh in basic skills will receive orientation regarding the adult education services provided. Students will learn about their educational options, participate in program assessment, and set their program goals.

DE 302
BEGINNING ENGLISH AS A SECOND LANGUAGE I
Units: 0

This noncredit, beginning level, open-entry, open-exit course is designed for non-native speakers of English and those who speak English as their second language. Course content includes phonics, listening skills, vocabulary, grammar, reading, writing, oral communication, social studies, and American culture.

Prerequisite: Proper placement based on ESL assessment instrument.

DE 305
INTERMEDIATE ENGLISH AS A SECOND LANGUAGE I
Units: 0

This noncredit, intermediate level, open-entry, open-exit course is designed for non-native speakers of English and those who speak English as their second language. It continues to build upon the four language competencies of reading, writing, listening and speaking English in an integrated skills format.

Prerequisite: Proper placement based on ESL assessment instrument or successful completion of DE 302, or the equivalent.

DE 305
ADVANCED ENGLISH AS A SECOND LANGUAGE I

Units: 0

This noncredit, advanced level, open-entry, open-exit course is designed for non-native speakers of English and those who speak English as their second language. The course is designed to prepare students to transition to college-level study. The course content includes advanced grammar studies as well as written and oral communication and reading.

It continues to build upon the four language competencies of reading, writing, listening and speaking English in an integrated skills format.

Prerequisite: Proper placement based on ESL assessment instrument or successful completion of DE 305, Intermediate English as a Second Language, or the equivalent.

DE 310
BASIC ENGLISH GRAMMAR

Units: 0

Basic English Grammar is geared toward secondary school students and adults in need of basic language skills. The course focuses on parts of speech and sentence structure and is designed to improve both written and spoken English. This is an ideal course for preparation for the California High School Exit Exam and will assist with the successful transition from high school to college or the workplace.

Advisory: 8th grade reading level

DE 312
BASIC ENGLISH COMPOSITION

Units: 0

Basic English Composition is designed to help secondary school students and adults develop practical writing skills. Sentence construction, spelling, paragraph development, and how to use sentences and paragraphs in everyday writing are emphasized.

Advisory: 8th grade reading level, successful completion of Basic English Grammar, or equivalent, per high school transcript or department English diagnostic test.

DE 320
AMERICAN LITERATURE

Units: 0

This introductory literature course guides a student through over 400 years of America's literary history. Students explore America's literary heritage from 1620 through the present. Selections are studied in chronological order with emphasis on how historical events shaped the literature of the time.

Advisory: 8th grade reading level, successful completion of Basic English Grammar, or equivalent, per high school transcript or department English diagnostic test.

DE 321
WORLD LITERATURE

Units: 0

World Literature is a culturally diverse collection of fiction, nonfiction, drama, poetry, comedy, and persuasive literature. Complete works and excerpts introduce the student to great works of literature from around the world and stimulate an interest and comprehension of different cultures.

Advisory: 8th grade reading level, successful completion of Basic English Grammar, or equivalent, per high school transcript or department English diagnostic test.

DE 330
MATH SKILLS

Units: 0

This basic arithmetic course is designed to develop the student's ability to perform operations with whole numbers, fractions, decimals, and percentages. Students who complete this course will be better prepared for the California High School Exit Exam and entry into a pre-algebra course.

DE 332
PRE-ALGEBRA

Units: 0

This course is designed for the adult student who needs more instruction in mathematics before entering an algebra course. Basic concepts of mathematics are reviewed, such as decimals, scientific notation, and factoring while introducing algebraic concepts in a step-by-step approach.

Advisory: Successful completion of a basic mathematics course or equivalent knowledge based on the program math diagnostic test.

DE 334
ALGEBRA

Units: 0

This course is designed for the adult student who needs step-by-step instruction to grasp algebraic concepts. This course builds on the knowledge gained in the Pre-Algebra course and introduces new algebraic concepts such as polynomials, irrational numbers, and quadratic equations. This course is ideal for those preparing for the state-wide California High School Exit Exam (CAHSEE).

Advisory: Successful completion of a pre-algebra mathematics course or equivalent knowledge based on high school transcripts or the program math diagnostic test.

DE 350
WORLD HISTORY

Units: 0

World History covers 8,000 years of significant events starting with the beginning of human society to contemporary times. This course has a multi-discipline approach; content from the arts, mathematics, and science as well as historical events are studied.

Advisory: 8th grade reading level.

DE 351
UNITED STATES HISTORY

Units: 0

This high school level United States history course is a chronological examination of individuals, groups and events that shaped the country from the first Americans in 1400 through the turn of the 21st century.

Advisory: 8th grade reading level, successful completion of high school level world history course.

DE 352
AMERICAN GOVERNMENT

Units: 0

American government is a practical study of the American political system. It is designed to inform students about their American system of government and make them aware of the responsibilities and power they have as a citizen in this democratic nation.

Advisory: 8th grade reading level, high school level world history and U.S. history.

DE 353
ECONOMICS

Units: 0

This introductory course lays the foundation for economic thinking and the ability to make informed choices in the national and international marketplace. Special emphasis is placed on the basic principles of the American economic system.

Advisory: 8th grade reading level.

DE 360
BIOLOGY

Units: 0

This introductory science course explores a full range of biological sciences. Students begin with study of the smallest unit of life, the cell, and progress to more complex biological systems. Topics such as cycles of life; basic chemistry; cell growth, development and reproduction; inheritance patterns, and ecosystems are among the areas covered.

Advisory: 8th grade reading level.

DE 365
PHYSICAL SCIENCE
Units: 0

This introductory physical science course explores the properties of matter, elements, compounds, electricity, sound and light. Students gain practice in working with data and sharpen their abilities to infer, classify, and theorize with physical science topics such as motion, heat, matter changes, magnets, and electromagnetism.

Advisory: 8th grade reading level, successful completion of Math Skills or equivalent as shown by high school transcript or department math diagnostic test.

DE 366
EARTH SCIENCE
Units: 0

This non-credit earth science course meets the physical science requirement for the adult high school diploma. The course provides instruction about the earth, planets, atoms, elements, oceans, climate, and space. Students also examine our solar system, types of erosion, stars, and various other earth-related topics.

Advisory: 8th grade reading level.

DE 370
HEALTH SCIENCE I
Units: 0

Health Science I is a required course that familiarizes students with basic knowledge about systems of the human body, growth and development, and health issues and choices that are faced by each individual. Health and fitness are stressed to assist students in making healthy life-style choices.

Advisory: 8th grade reading level.

DE 371
HEALTH SCIENCE II
Units: 0

Health Science II is an elective health course taken in the high school completion program. The course covers topics such as general wellness as a matter of choice; physical fitness; and mental, emotional, family and social health concerns.

Advisory: 8th grade reading level.

DE 390
GED PREPARATION - SCIENCE
Units: 0

This GED preparation course is an overview of life, earth and space, and physical science geared toward the student who wishes to improve his or her GED science score: General science curriculum is interspersed with test taking strategies and opportunities to test acquired knowledge. Students may choose to work from a text or opt for computerized instruction.

Prerequisite: Earn less than a score of 450 on the GED Science Pre-test.

DE 392
GED PREPARATION - SOCIAL STUDIES
Units: 0

This GED preparation course covers a broad spectrum of social science curriculum: United States history, world history, civics and government, economics, and geography. It is designed for the student who wishes to improve his or her GED social studies score. This course covers social studies content as well as test-taking strategies and opportunities to test acquired knowledge. Students may choose to work from a text or opt for computerized instruction.

Prerequisite: Earn less than a score of 450 on the GED Social Studies Pre-test.

DE 394
GED PREPARATION - LANGUAGE ARTS, READING
Units: 0

This GED preparation course covers four categories of literature: non-fiction, fiction, poetry, and drama. It is designed for the student who wishes to improve his or her GED score in Language Arts, Reading. Students will experience a varied selection of literary works and learn techniques to interpret and analyze literature. Students may choose to work from a text or opt for computerized instruction.

Prerequisite: Earn less than a score of 450 on GED Language Arts, Reading Pre-test.

DE 396
GED PREPARATION - MATHEMATICS
Units: 0

This GED preparation course is designed to prepare the student to successfully pass the mathematics portion of the GED test. The curriculum presents a thorough review of simple mathematical operations and progresses on to cover measurement and data analysis, algebra and geometry. Students may choose to work from a text or opt for computerized instruction.

Prerequisite: Earn less than a score of 450 on the GED Mathematics Pre-test.

DE 398
GED PREPARATION - LANGUAGE ARTS, WRITING
Units: 0

This GED preparation course is designed to prepare the student to successfully pass the language arts and writing portion of the GED test. The curriculum consists of two distinct areas of concentration: grammar and mechanics, and writing a clear, well-organized essay. Students may choose to work from a text or opt for computerized instruction.

Prerequisite: Earn less than a score of 450 on the GED Language Arts, Writing Pre-test.

DISABLED STUDENTS PROGRAMS AND SERVICES (DSPS)

DSPS 040
SURVEY OF RESOURCES FOR STUDENTS WITH DISABILITIES
2 Units
Lecture: 2 hours

This course focuses on self-assessment of the student who is disabled. It also introduces the student to the information and skills necessary for success in college. Course topics include development of personal goals, as well as use of services provided by DSPS, other student support services and community resources. Students develop realistic educational plans consistent with their educational goals and learn what accommodations will be necessary to achieve these goals.

Advisory: Intended for students with disabilities

DSPS 040A
PERSONAL ASSESSMENT FOR STUDENTS WITH DISABILITIES
2 Units
Lecture: 2 hours

This course explores the individual needs and goals of students with disabilities, including the college experience, guidance, counseling, support services, and employment. Emphasis is on information dissemination and self-assessment.

Advisory: Intended for students with disabilities
CSU, Associate Degree Applicable

DSPS 040B
EMPLOYMENT FOR INDIVIDUALS WITH DISABILITIES
2 Units
Lecture: 2 hours

This course focuses on the fundamentals of employment and the process of developing goals for future employment of persons with disabilities.

Advisory: Intended for students with disabilities
CSU, Associate Degree Applicable

DSPS 041
INFORMATION MANAGEMENT STRATEGIES

2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours

Course emphasis is to develop or enhance the ability of students with disabilities to manage and organize information. Multimedia instruction is utilized. The lecture section includes specific software programs designed to assist students in the management of information in a technological society. The lab section provides repetition of the stimulus topic via software utilization, specialized hardware, plus individualized computer assisted instruction specific to word processing skill development.

Advisory: Intended for students with disabilities

DSPS 042
ALTERNATIVE LEARNING STRATEGIES

2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours

This is specialized computer assisted instruction primarily for students with learning disabilities and/or acquired brain injuries. Students with other disabilities may also benefit from this course. Students are provided strategies and opportunities to maximize their learning potential and increase academic efficiencies.

Advisory: Intended for students with disabilities

DSPS 044
COMPUTER ACCESS KEYBOARDING

1 Unit
Laboratory: 3 hours

This course is a self paced computerized keyboarding class designed for students with verified disabilities. The students may need adaptive technology to access the keyboard or screen or if they are unable to successfully complete the college keyboarding course. Students will learn the basics of keyboarding to ensure success in the completion of their assignments in their college classes.

Prerequisite: Recommendation by an appropriate Disabled Students Programs and Services staff member.

DSPS 045A
JOB SKILLS DEVELOPMENT - VOCATIONAL EXPLORATION

1 Unit
Lecture: 1 hour

This course is designed to assist students with disabilities in developing specific goals for employment. Its focus is on personal and vocational assessment, clarification of values, identification of skills, and the development of a vocational plan.

Advisory: Intended for students with disabilities

DSPS 045B
JOB SKILLS DEVELOPMENT - JOB APPLICATIONS AND RESUME WRITING

.5 Unit
Lecture: .5 hour

This course is designed to assist students with disabilities in successfully completing job applications and writing a resume.

Advisory: Intended for students with disabilities

DSPS 045C
JOB SKILLS DEVELOPMENT - JOB INTERVIEW SKILLS

.5 Unit
Lecture: .5 hour

This course is designed to assist students with disabilities to develop successful job interviewing skills.

Advisory: Intended for students with disabilities

DSPS 046
ONLINE LEARNING STRATEGIES

1 Unit
Lecture: 1 hour

This course will develop the skills necessary for DSPS students to be successful in the online environment. Students will be guided through computer basics; become familiar with online components; practice skills for creating, saving, and submitting assignments; and communicate through discussion board posts and email.

Distance Modality: Online, hybrid
Advisory: Intended for students with disabilities and CIS 050

DSPS 047
COMPUTER ACCESS APPLICATIONS

1 Unit
Laboratory: 3 hours

Students with verified disabilities will utilize adaptive software for the purpose of overcoming educational limitations through technology. The DSPS Specialist will determine the software to be mastered based on the student's disability. The student will become proficient in the usage of the software and use the lab time to complete assignments in regular coursework.

Prerequisite: Recommendation by an appropriate Disabled Students Programs and Services staff member.

DSPS 048
SPEECH TO TEXT TRAINING

1 Unit
Laboratory: 3 hours

This course in intended to prepare students to utilize current, appropriate speech-to-text software as an educational aid. Student will acquire increasing knowledge of the software capabilities by attending a weekly 1 hour mandatory lab session. During additional lab hours, students will demonstrate proficiency by independently using the software to successfully complete other college coursework.

Advisory: Intended for students with disabilities.

DSPS 049
TEXT TO SPEECH TRAINING

1 Unit
Laboratory: 3 hours

This course is designed to prepare students to utilize current, appropriate text-to-speech software as an educational aid. Students will acquire increasing knowledge of the software capabilities by attending a weekly 1 hour mandatory lab session. During additional lab hours, students will demonstrate proficiency by independently using the software to successfully complete other college coursework.

Advisory: Intended for students with disabilities.

DSPS 301
SPECIALIZED LEARNING SKILLS DEVELOPMENT

0 Units

Students are individually evaluated to determine their specific learning disability. Individual learning strategies are developed and students learn to use appropriate accommodations, emphasizing computer hardware and software. Students receive a credit/no credit grade mark.

Prerequisite: Students must be referral by the Learning Disability Specialist
Corequisite: DSPS 304

DSPS 304
INSTRUCTIONAL SUPPORT LAB

0 Units
Laboratory: Hours as needed

The Instructional Support Lab provides basic skills tutorials (reading, English, arithmetic, and algebra) and adaptive software to support disabled students enrolled in regular college programs or adult basic education. A learning specialist provides an individualized program of computerized activities that enhances the student's ability to overcome educational limitations, leading to the successful completion of college coursework.

Prerequisite: Recommendation by an appropriate Disabled Students Programs and Services staff member.

DSPS 305
COMPUTER ACCESS ASSESSMENT

0 Units
Laboratory: 3-5 hours for assessment

Students with disabilities are assessed by the lab instructor to determine the effectiveness of selected adaptive technology for overcoming the specific educational limitation. Each student is referred to this course by the DSPS Specialist. After an assessment, the student may elect to continue extensive training in the selected software in DSPS 047, Computer Access Applications.

Prerequisite: Recommendation by an appropriate Disabled Students Programs and Services staff member.

EARLY CHILDHOOD EDUCATION (ECE)

ECE 001
INTRODUCTION TO EARLY CHILDHOOD PROGRAMS

3 Units
Lecture: 3 hours

This course provides an overview of the field of child development/ early childhood education, including the historical and philosophical foundations and how these foundations influence current theory and practice. An exploration of the various types of programs for young children and the job potential for students are included. Students are required to visit and report on five different types of programs in the community.

Advisory: ENG 050 and ECE 010A
CSU, Associate Degree Applicable

ECE 010A
CHILD GROWTH AND DEVELOPMENT

3 Units
Lecture: 3 hours

This course studies the developing child with emphasis on the biosocial, cognitive, and psychosocial growth from conception through five years of age. It includes the major theories of development. Observations provide opportunity for integration of theory and practice for typically developing children as well as those with disabilities. It is the basic introductory course for all Early Childhood Education majors, and is required for teacher licensing in private centers, and teacher certification for publicly funded centers.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

ECE 010B
CHILD DEVELOPMENT: SCHOOL AGE AND ADOLESCENCE (AGES 6-18)

3 Units
Lecture: 3 hours

This course studies the developing child with emphasis on the physical, social, psychological, and intellectual growth from six years of age through adolescence. Identification of the key concepts, comparison of theoretical perspective, application of empirical generalizations, and analysis of major issues for this age group is of primary concern for this course.

Advisory: ECE 010A and ENG 050
CSU, UC, Associate Degree Applicable

ECE 012
CHILD, FAMILY AND COMMUNITY

3 Units
Lecture: 3 hours

This course studies the influence of contemporary family and cultural patterns on young children. Emphasis is placed on establishing effective school-parent relationships through conferences and parent meetings. Community resources and agencies that strengthen families are examined. This course is required by the California State Department of Social Services for teachers and directors of preschool programs.

Prerequisite/Corequisite: ECE 010A
Advisory: ENG 050
CSU, Associate Degree Applicable

ECE 014
EARLY CHILDHOOD PRINCIPLES AND PRACTICES

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course explores the basic techniques of working with young children, including: promoting self-esteem, creativity, self-discipline, development of physical and cognitive skills, and planning appropriate curriculum.

Prerequisite: ECE 010A and ECE 012
CSU, Associate Degree Applicable

ECE 015
EARLY CHILDHOOD LABORATORY

2 Units
Laboratory: 6 hours

Under the supervision of the laboratory teacher or mentor teacher and with the assistance of the Child Development Specialists, students participate in all classroom activities. Students plan developmentally appropriate curriculum that integrates theoretical concepts with classroom practice. Particular attention is given to planning for individual children's needs and interests and presenting concepts within the cultural context of the children in the environment. Students assess their own professional competence and progress toward their own goals. Students also write resumes and develop interview skills, while developing a plan for future employment and growth.

Prerequisite: ECE 014
Advisory: ENG 051
CSU, Associate Degree Applicable

ECE 019
CHILDREN'S LANGUAGE AND LITERATURE

3 Units
Lecture: 3 hours

This course is designed to help teachers build language opportunities into every curriculum area; to explore methods of fostering language skills of the young child; and introduce prereading experiences. This course includes the study of children's literature, standards for evaluating books and computer software, techniques of story telling, and puppetry.

Prerequisite: ECE 010A
Advisory: ENG 050
CSU, Associate Degree Applicable

ECE 020
INFANT/TODDLER GROWTH AND DEVELOPMENT
3 Units
Lecture: 3 hours

This course studies the process of human development from conception through age two as determined by heredity, society, and human interaction with implication for child guidance. Prenatal development and the birth process are emphasized. Planning appropriate curriculum that respects the individuality and developmental patterns of all children including cultural, linguistic, and ability differences are emphasized. Observation of a neonate, infant, and toddler are required.

Advisory: ECE 010A and ENG 050
CSU, Associate Degree Applicable

ECE 021
INFANT/TODDLER ENVIRONMENTS
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course prepares students to develop and implement an infant and/or toddler curriculum including design of a developmentally appropriate learning environment. Licensing requirements and teacher competency necessary for working with infants and toddlers are explored. Students complete three hours per week lab in the infant-toddlers classroom or Infant Circle program at the Child Development Center in which they plan and implement appropriate, culturally and linguistically competent and inclusive lessons.

Advisory: ECE 010A and ENG 050
CSU, Associate Degree Applicable

ECE 023
THE MENTOR TEACHER/ADULT SUPERVISION
2 Units
Lecture: 2 hours

Methods and principles of supervising adults who are student teachers, assistants or volunteers in early childhood classrooms. Emphasis is on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents, and other staff.

Advisory: ECE 010A and ENG 050
CSU, Associate Degree Applicable

ECE 024
ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN
3 Units
Lecture: 3 hours

This course examines the requirements for the administration of programs for young children including private and publicly funded day care centers and preschool programs, emphasizing business procedures. It is required by the State Department of Social Services for directors of private preschools and child care programs.

Advisory: ECE 010A and ENG 050
CSU, Associate Degree Applicable

ECE 025
ADVANCED ADMINISTRATION OF PROGRAMS FOR YOUNG CHILDREN
3 Units
Lecture: 3 hours

This course provides an advanced level of administrative and managerial knowledge needed to operate a child care center as a successful business. Emphasis is on personnel management procedures, working collaboratively with parents, personal growth and advancement, and self assessment.

Prerequisite: ECE 024 with a grade of "C" or better and completion of 12 units in ECE
CSU, Associate Degree Applicable

ECE 026
MUSIC AND MOVEMENT ACTIVITIES FOR THE SCHOOL AGE CHILD
2 Units
Lecture: 2 hours

This course explores the importance and meaning of music and movement for the school age child. This course emphasizes listening skills, singing, movement education, creating instruments, and playing the autoharp.

Associate Degree Applicable

ECE 030
EARLY CHILDHOOD CURRICULUM DESIGN AND IMPLEMENTATION
3 Units
Lecture: 3 hours

This course is a study of curriculum development for early childhood programs. It includes the relationship of child development principles to curriculum design and organization. Daily routine, room arrangement, and the development of social, emotional, physical, aesthetic and cognitive skills are emphasized. Curriculum planning for individual differences is emphasized.

Advisory: ECE 010A and ENG 050
CSU, Associate Degree Applicable

ECE 032
CHILD ABUSE AND NEGLECT
1 Unit
Lecture: 1 hour

This course examines physical abuse and neglect, emotional abuse and neglect, and sexual abuse of children. Emphasis is on how the classroom teacher, foster parents, and members of the general public can prevent, detect, and intervene in cases of child abuse.

CSU, Associate Degree Applicable

ECE 033
SURVEY OF SPECIAL EDUCATION
3 Units
Lecture: 3 hours

This course provides an introduction to special education in the public schools. Legal aspects, assessment, placement and examination of all the disabilities served in the public school and child care setting will be examined. The role of child care professionals and paraprofessionals in the field of special education is emphasized.

Prerequisite: ECE 010A with a grade of "C" or better
CSU, Associate Degree Applicable

ECE 035
ISSUES IN SPECIAL EDUCATION
3 Unit
Lecture: 3 hours

This course prepares students to become teachers in inclusive programs. The focus of the catalog is on implementation inclusive early childhood programs for children with learning disabilities, developmental disabilities, physical challenges, and problem behaviors. Students learn how to facilitate curriculum as well as how the learning environments that dictates children's learning and behavior.

Prerequisite: ECE 033
Associate Degree Applicable

ECE 040A
CREATIVITY IN YOUNG CHILDREN
2 Units
Lecture: 2 hours

This course examines materials and techniques which foster the development of creativity in young children. Various sensory modalities are explored including identification of sensory-motor environment components.

Advisory: ECE 010A
CSU, Associate Degree Applicable

ECE 040B
MOVEMENT ACTIVITIES FOR YOUNG CHILDREN
2 Units
Lecture: 2 hours

This course emphasizes movement activities designed to develop gross and fine motor skills and increase self-confidence in young children.

Advisory: ECE 010A
CSU, Associate Degree Applicable

ECE 040C
MUSIC FOR YOUNG CHILDREN
2 Units
Lecture: 2 hours

This course emphasizes the development of curriculum ideas for using music to develop listening ability, rhythm dancing, singing, identifications of instruments, and pitch. Teaching techniques and materials appropriate to the growth and development of young children are explored.

Advisory: ECE 010A
CSU, Associate Degree Applicable

ECE 040D
SCIENCE AND NUMBER CONCEPTS FOR YOUNG CHILDREN
2 Units
Lecture: 2 hours

This course explores the development of curriculum ideas for teaching our environment and conservation of natural resources to young children. Included will be the sequence of mathematical concepts appropriate to different stages of development.

Advisory: ECE 010A
CSU, Associate Degree Applicable

ECE 044
CHILD HEALTH, SAFETY, AND NUTRITION
3 Units
Lecture: 3 hours

This course provides information on the physical and mental health of children in an early childhood educational setting. The course includes evaluation of children's health and the referral process to local resources. Safety concerns for young children in preschool settings are addressed. Nutrition of young children are explored including methods of planning and teaching basic concepts to children. Also included is information regarding safety standards, sanitation principles and procedures to reduce the spread of disease.

Advisory: ECE 010A
CSU, Associate Degree Applicable

ECE 060
KEEPING CHILDREN SAFE
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to develop the skills necessary to provide a safe indoor and outdoor environment, to respond to emergencies appropriately, and to help children develop safety habits.

CSU, Associate Degree Applicable

ECE 061
PROMOTING GOOD HEALTH AND NUTRITION IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to develop a healthy indoor and outdoor environment, to teach children to practice healthful activities, and to develop a reporting process for child abuse and neglect.

CSU, Associate Degree Applicable

ECE 062
CREATING A LEARNING ENVIRONMENT FOR CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to acquire the skills necessary to encourage play and exploration, to select and arrange appropriate materials and equipment that foster growth and learning, and to plan schedules and routines appropriate to the ages of the children.

CSU, Associate Degree Applicable

ECE 063
PROMOTING PHYSICAL DEVELOPMENT IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to reinforce and encourage children's physical development and to select the appropriate equipment and activities for gross and fine motor development.

CSU, Associate Degree Applicable

ECE 064
PROMOTING COGNITIVE DEVELOPMENT IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to develop the skills necessary to provide opportunities for children to use their senses to explore, interact, build confidence, and develop a cognitive frame of reference.

CSU, Associate Degree Applicable

ECE 065
ENCOURAGING COMMUNICATION IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to interact with children in ways to encourage them to communicate their thoughts and feelings to others.

CSU, Associate Degree Applicable

ECE 066
PROMOTING CREATIVITY IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to encourage children to use imagination and thinking skills by providing experiences which promote creative expression.

CSU, Associate Degree Applicable

ECE 067
BUILDING SELF-ESTEEM IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to build a positive relationship with each child. Providers learn how to help children understand and appreciate their self worth and feel successful and competent.

CSU, Associate Degree Applicable

ECE 068
PROMOTING SOCIAL DEVELOPMENT IN CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to understand children's social development and to teach children appropriate negotiation skills as well as how to enjoy people in their lives.

CSU, Associate Degree Applicable

ECE 069
PROVIDING POSITIVE GUIDANCE TO CHILDREN
1.5 Units
Lecture: 1.5 hours

This course enables providers of childcare for infants through school age children to use positive methods to guide and help children express their feelings in an acceptable manner and to encourage the development of self-discipline.

CSU, Associate Degree Applicable

ECE 071
WORKING WITH FAMILIES
1 Unit
Lecture: 1 hour

This course enables providers of childcare who work with families the necessary information and skills to communicate effectively, encourage parental participation in their setting, and help families respond appropriately to their child's behavior.

CSU, Associate Degree Applicable

ECE 072
BEING A CLASSROOM MANAGER
1 Unit
Lecture: 1 hour

This course enables providers of childcare to develop a systematic approach to managing all aspects of a quality childcare program.

CSU, Associate Degree Applicable

ECE 073
MAINTAINING A COMMITMENT TO PROFESSIONALISM IN THE CLASSROOM
1 Unit
Lecture: 1 hour

This course provides providers of childcare to understand the importance of professionalism in child care and recognize that each person is a member of a team which provides an important service.

CSU, Associate Degree Applicable

ECONOMICS (ECON)

ECON 001
PRINCIPLES OF MACROECONOMICS
3 Units
Lecture: 3 hours

Principles of Macroeconomics introduces students to economic theory and analysis, with an emphasis on basic economic concepts; national income determination and fluctuations; unemployment; inflation; economic growth; the role of money and banking and monetary theory; and the economic role of government. Current economic issues are also discussed in the context of a global economy.

Distance Modality: Online, hybrid
Prerequisite: ENG 051 and MATH 040
Advisory: RDG 051
CSU, UC, Associate Degree Applicable

ECON 002
PRINCIPLES OF MICROECONOMICS
3 Units
Lecture: 3 hours

Principles of Microeconomics introduces students to microeconomic theory and analysis. Students study choices of individual economic decision makers. Behavior of consumers, businesses, owners of resources, government and the international sector are addressed. Efficiency of multiple market structures and the role of government intervention is explored.

Distance Modality: Online, hybrid
Prerequisite: ENG 051 and MATH 040
Advisory: RDG 051
CSU, UC, Associate Degree Applicable

ECON 011
INTERNATIONAL ECONOMIC RELATIONS
3 Units
Lecture: 3 hours

This course is the study of international trade, investment, technology transfer, and the international flow of labor. Students will become familiar with the principles of international economic relations and its complexities through class lectures, review of current literature, and class discussions.

Advisory: ECON 001
CSU, UC, Associate Degree Applicable

ELECTRICITY (ELEC)

ELEC 001
FUNDAMENTALS OF DC ELECTRICITY
3 Units
Lecture: 3 hours

This course provides an introduction to direct current (DC) theory, practices and applications. It encompasses a study of electrical nomenclature and components for students beginning electrical studies, for occupational goals, for continuing education, or for increasing student's skill level in DC electricity.

Corequisite: MATH 056

ELEC 001L
FUNDAMENTALS OF DC ELECTRICITY LAB
1 Units
Laboratory: 3 hours

This course provides supplementary laboratory experience for those students currently enrolled in or who have successfully completed ELEC 001. Students will conduct experiments involving series/parallel circuits; they will investigate the measurement of voltages, currents, and power, comparing experimental results with calculated values. Critical practical studies in Fundamentals of DC Electricity are emphasized.

Corequisite: ELEC 001 and MATH 056

ELEC 011
OSHA STANDARDS FOR CONSTRUCTION
2 Units
Lecture: 2 hours

This course covers Occupational Safety & Health Administration (OSHA) policies, procedures, and standards, as well as construction safety and health principles. Topics include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. Upon successful course completion, the student will receive an OSHA 30 Hour Construction Outreach Training Completion Card.

Associate Degree Applicable

EMERGENCY MEDICAL TECHNICIAN (EMT)

See Page 61 for additional Information.

EMT 084
EMERGENCY MEDICAL TECHNICIAN I

6 Units
Lecture: 4 hours
Laboratory: 6 hours

This course prepares students for Emergency Medical Technician (EMT) I certification. Students study and practice the fundamental principles and skills required to provide care to patients experiencing trauma and emergency medical conditions. This course is approved by San Bernardino County Emergency Medical Services (EMS) and meets all Title 22 regulations. The course includes theory instruction, skills practice, and supervised field and clinical time in selected pre-hospital sites. Students must be 18 to enroll in the course per the Inland Counties Emergency Medical Agency (ICEMA).

Prerequisite: ENG 050
Associate Degree Applicable

EMT 085
EMERGENCY MEDICAL TECHNICIAN REFRESHER COURSE

2 Units
Lecture: 2 hours

This refresher course for current Emergency Medical Technician (EMT) I personnel meets or exceeds the requirements specified in the California Code of Regulations, Title 22, Chapter 5, Section 9. The re-certification shall be available for those whose EMT cards have not expired for more than one (1) year. The course contains information on new EMT techniques and procedures, refresher for cardiopulmonary resuscitation, and a review of current local protocols. Both written and skills competency examinations are required for course completion. This course may be taken as many times necessary for recertification.

Prerequisite: Current California EMT I Certificate
Associate Degree Applicable

ENGLISH (ENG)

ENG 001B
COMPOSITION AND LITERATURE

3 Units
Lecture: 3 hours

This course introduces students to the genres of imaginative literature — prose, fiction, poetry, and drama — with special emphasis on the interrelationships between form and theme. Students write critical essays about the literature.

Distance Modality: Online
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 003A
COLLEGE COMPOSITION

3 Units
Lecture: 3 hours

College Composition emphasizes processes of writing and the critical examination of readings as a means of analyzing assumptions and communicating more effectively. Students will write 8,000 to 10,000 words in a range of rhetorical situations with primary emphasis on expository, argumentative, and persuasive modes, including a research paper. ENG 003A is also concerned with critical thinking, critical analysis, logic, and avoidance of logical fallacies. Upon successful completion of College Composition, students should be prepared to find and evaluate sources and to write effectively in all settings, academic and professional. ENG 003A does not satisfy the reading competency requirements for graduation.

Advisory: RDG 051
Prerequisite: ENG 051 or placement by examination
CSU, UC, Associate Degree Applicable

ENG 004
WRITING THE RESEARCH PAPER

1 Units
Lecture: 1 hour

This workshop, which concentrates on computerized research, documentation, and composition, provides practical experience to students in all phases of preparing a researched paper. Students will select a topic; gather and evaluate information using current library holdings, on-line databases, and Internet research sources; and complete a research paper in either MLA or APA format, including appropriate internal documentation and list of sources. This course is designed to be taken as preparation for a course requiring a research paper, in conjunction with a content-area course requiring a research paper, or as a refresher course for students who are unfamiliar with electronic research resources.

Distance Modality: Hybrid
Advisory: ENG 050, RDG 050, familiarity with basic word processing features

ENG 005A
CREATIVE WRITING

3 Units
Lecture: 3 hours

This course introduces students to the perceptions, skills, and techniques of all forms of creative writing, with primary emphasis on fiction and poetry.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 005B
ADVANCED CREATIVE WRITING

3 Units
Lecture: 3 hours

This is an advanced course designed to enable students to refine their creative writing skills in their chosen genre.

Prerequisite: ENG 005A
CSU, UC, Associate Degree Applicable

ENG 010A
AMERICAN LITERATURE I

3 Units
Lecture: 3 hours

This course presents a survey of American literature, both formal and informal, extending from the period preceding Columbus' voyages through the Civil War era. Selections include writings of traditional and non-traditional American authors that reflect the rich and diverse cultural backgrounds that make up America's unique and complex heritage.

Distance Modality: Online, hybrid, instructional TV
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 010B
AMERICAN LITERATURE II

3 Units
Lecture: 3 hours

This course presents a survey of late nineteenth and twentieth Century American literature. Selections include writings of traditional and non-traditional American authors that reflect the rich and diverse cultural backgrounds that make up America's unique and complex heritage.

Distance Modality: Online, hybrid, instructional TV
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 011A
SURVEY OF ENGLISH LITERATURE: OLD ENGLISH TO EIGHTEENTH CENTURY

3 Units
Lecture: 3 hours

The course surveys the major writers and works of English literature of the Old English, Middle English, the Renaissance, the Seventeenth and Eighteenth centuries.

Distance Modality: Online, hybrid, instructional TV
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 011B
SURVEY OF ENGLISH LITERATURE: ROMANTIC THROUGH MODERN

3 Units
Lecture: 3 hours

This course surveys the major writers and works of English literature of the Romantic, Victorian, Edwardian, and Modern Periods.

Distance Modality: Online, hybrid, instructional TV
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 012A
WORLD LITERATURE I

3 Units
Lecture: 3 hours

This course presents a survey of the literary works that have influenced world thought from Homer through the Renaissance to 1660. Classics in all genres are studied for their artistic merit and their contribution to modern life.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 012B
WORLD LITERATURE II

3 Units
Lecture: 3 hours

This course surveys works which have influenced world thought from 1660 to the present. Selections reflect the rich and diverse cultural backgrounds of world literature. This course may be taken independently from World Literature I, ENG 012A.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 014
SHAKESPEARE

3 Units
Lecture: 3 hours

This course helps students acquire an understanding of William Shakespeare by exploring his major themes and their relevance to modern life. Students study selected histories, comedies, and tragedies of Shakespeare, as well as an introduction to his sonnets, world, scholarly criticism, and life. The emphasis of the course will be on making Shakespeare and his works accessible through a variety of instructional methods.

Distance Modality: Hybrid
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 015
THE SHORT STORY

3 Units
Lecture: 3 hours

This course introduces students to short fiction from a variety of countries and cultural/ethnic traditions. Through discussions of common readings and a range of instructional approaches, students will study the history of the short story including, current and traditional scholarship, literary criticism, and the relevance and influences of short fiction. Approaches to explication and analysis that utilize such literary elements as plot, setting, style, character, and theme will also be studied.

Distance Modality: Online, hybrid
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 016
LITERATURE OF THE DESERT

3 Units
Lecture: 3 hours

This course surveys nonfiction and fiction inspired by the desert, and by authors living in the desert. Emphasis is on the desert literature of the southwestern United States. This course includes an introduction to desert environment and one's relationship to it. Field trips may be required.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 017
WOMEN IN LITERATURE

3 Units
Lecture: 3 hours

This course presents a survey of literature written by and about women in the American, European, Asian, and Latin American traditions. Students examine archetypes and stereotypes of women as they are challenged in the literature.

Distance Modality: Online, Hybrid
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 018
INTRODUCTION TO POETRY

3 Units
Lecture: 3 hours

This course introduces the student to the techniques and development of poetry through the discussion and criticism of poetry in its historical context. Students are encouraged to compose their own poems based on forms studied in the course.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 021
INTRODUCTION TO LATIN AMERICAN/CHICANO LITERATURE

3 Units
Lecture: 3 hours

This course is a survey of literary analysis of folk, traditional, and contemporary Latin American/Chicano literature with critical analysis of representative works in all the literary genres: the essay, short stories, the novel, poetry, and drama.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 022
INTRODUCTION TO AFRICAN-AMERICAN LITERATURE

3 Units
Lecture: 3 hours

This course is a survey of literary analysis of folk, traditional, and contemporary African-American literature. Critical analysis of representative works in all the literary genres are studied: the essay, the short story, the novel, poetry, and drama. Students will consider the historical, cultural, social, scientific, and political forces shaping the literary works.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 025
INTRODUCTION TO THE NOVEL

3 Units
Lecture: 3 hours

This course introduces students to the techniques and development of fiction by the discussion and criticism of novels from countries throughout the world.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 035
MYTH AND LEGEND

3 Units
Lecture: 3 hours

This course provides an introduction to the mythological and legendary literature from various world cultures, with special reference to Judeo-Christian, Oriental, Native American, Northern European, and classical Greek and Roman mythologies.

Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 041
TECHNICAL AND PROFESSIONAL WRITING

3 Units
Lecture: 3 hours

This course teaches students to communicate effectively within the business environment. Specifically, students will understand an utilize various modes of business and professional written and oral communications. Students will earn to write and critique résumés, business correspondence, proposals, abstracts, researched formal reports, manuals, brochures, and to employ basic formatting, grammar, and rhetoric. This course will also familiarize students with business and professional applications of technology.

NOTE: For students seeking an occupation/vocational associate's degree, this course may be taken in lieu of ENG 003A.

Distance Modality: Hybrid
Prerequisite: ENG 051
Advisory: CIS 070A
CSU, Associate Degree Applicable

ENG 045
SURVEY OF MILITARY LITERATURE

3 Units
Lecture: 3 hours

This course is a survey of United States military literature from 1775 to date with required reading of fiction and nonfiction materials.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

ENG 050
BASIC WRITING SKILLS

4 Units
Lecture: 4 hours

This non-transferable course provides extensive study of basic language skills in preparation for higher level writing courses. Students write paragraphs and short essays and develop an awareness of correct grammar, usage, mechanical skills, form, and organization. Students may choose the credit/no credit or letter grade option.

ENG 051
INTRODUCTION TO EXPOSITORY WRITING

3 Units
Lecture: 3 hours

This non-transferable course helps students improve their skills in writing, including a review of grammar, punctuation, and sentence skills. Students are introduced to researched writing to prepare them for college-level courses.

Prerequisite: ENG 050 or placement by examination
Advisory: RDG 050
Associate Degree Applicable

ENG 055
ENGLISH REFRESHER WORKSHOP

1 Units
Lecture: 1 hours

This course, which focuses on writing at the sentence level, provides intensive instruction on the rules of basic sentence structure, grammar, punctuation, and mechanics. It is designed for students wishing to refresh their skills as well as those who need additional work in order to prepare for writing classes. Students may choose the credit/no credit or letter grade option.

Advisory: Listen, speak, read, and write to a level adequate to be successful in basic writing and reading classes.

FIRE TECHNOLOGY (FIRE)

FIRE 001
FIRE PROTECTION ORGANIZATIONS

3 Units
Lecture: 3 hours

This course surveys career opportunities in California Fire and Emergency Management Services and related fields; explores the history of fire protection; fire loss analysis, reviews public, quasi-public, and private fire protection services; reviews specific fire protection functions; introduces fire chemistry and physics. This course is designated as Fire 1 by the California State Board of Fire Services and the State Fire Marshal and is part of the designated core curriculum.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 002
FIRE PREVENTION

3 Units
Lecture: 3 hours

This course provides the fundamental organization and function of fire prevention; inspections; surveying and mapping procedures; recognition of fire and life hazards; engineering a solution of a fire hazard; enforcing solutions to a fire hazard; public relations as effected by fire prevention. This course is designated Fire 2 by the California State Board of Fire Services and the State Fire Marshal and is part of the designated core curriculum.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 003
FIRE PROTECTION EQUIPMENT AND SYSTEMS

3 Units
Lecture: 3 hours

This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishing equipment; protection systems for special hazards; sprinkler systems and fire detection, and alarm systems. This course is designated Fire 3 by the California State Board of Fire Services and the State Fire Marshal and is part of the designated core curriculum.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 004
BUILDING CONSTRUCTION FOR FIRE PROTECTION

3 Units
Lecture: 3 hours

This course provides the fundamentals of building design and construction with emphasis on fire protection features including: building equipment facilities, fire resistant materials, and high rise.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 005
FIRE BEHAVIOR AND COMBUSTION

3 Units
Lecture: 3 hours

This course explores and analyzes the fundamentals and specific principles of fire behavior, combustible materials, extinguishing agents, hazardous and toxic material, forms of energy and fire prevention/ suppression techniques. This course is designated Fire 5 by the California State Board of Fire Services and the State Fire Marshal and is part of the designated core curriculum.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 006
HAZARDOUS MATERIALS/ICS

3 Units
Lecture: 3 hours

This course introduces the student to the world of hazardous chemicals, including their physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. Basic information is covered regarding emergency procedures, legal requirements, compliance to regulations, health effects and treatment, and fire department protocols and responsibilities. This course is designated FIRE 6 by the State Board of Fire Services and California State Fire Marshal.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 010
PAID-CALL FIREFIGHTER ACADEMY

7 Units
Lecture: 5 hours
Laboratory: 6 hours

This introductory course gives students the classroom theory and manipulative skills required in modern fire fighting. Students will learn entry-level skills, including structural and wildland fire fighting, hazardous material operations, auto extrication, and basic rescue skills. This course prepares students for entry into a paid-call firefighter position.

Prerequisite: Complete a physical exam and demonstrate the physical stamina and ability to safely operate and control fire service tools, equipment and apparatus. Students must attend a mandatory orientation.

FIRE 011
ADVANCED PAID-CALL FIREFIGHTER ACADEMY

7 Units
Lecture: 5 hours
Laboratory: 6 hours

This course gives students the classroom theory and manipulative skills required in modern fire fighting. Students will learn entry-level skills, including structural and wildland fire fighting, flammable liquid and gas fighting, rope rescue, and basic firefighting skills. This course combined with the successful completion of FIRE 10 fulfills the training requirement for the California State Fire Marshal ("CSFM") Firefighter I certificate.

Prerequisite: FIRE 010 or must have obtained all of the CSFM certificates and have challenged the course with a grade of 80% or higher. Complete a recent physical exam and demonstrate the physical stamina and ability to safely operate and control fire service tools, equipment and apparatus. Students must attend a mandatory orientation.
Corequisite: FIRE 001 or equivalent.
Associate Degree Applicable

FIRE 015
WILDLAND FIRE CONTROL

7 Units
Lecture: 5 hours
Laboratory: 6 hours

This course examines factors affecting wildland fire prevention. Students will learn about the types of resources available to fight a wildland fire, wildland fuel characteristics, tactics, safety procedures, and proper use of fire fighting tools. Further, the course will consider wildland fire behavior and control techniques.

Advisory: Eligibility for ENG 050
Associate Degree Applicable

FIRE 020
INTRODUCTION TO VOLUNTEER FIRE SERVICE

1.5 Units
Lecture: 1.5 hours

This course specifically introduces the local fire volunteer to the community fire station and its operational and fire procedures.

Associate Degree Applicable

FIRE 058
FIRE PROTECTION HYDRAULICS AND WATER SUPPLY

3 Units
Lecture: 3 hours

This course provides a foundation of theoretical knowledge needed to understand the basic use of water in fire protection, such as the principles of the hydraulic forces that affect water at rest and in motion. Students learn to apply the principles of hydraulics in the analysis of water supply problems such as calculating engine water supply pressure, and getting the most pressure out of the available water supply. The course covers the design principles of fire service pumping apparatus and community fire flow demand criteria. Also included are the causes of firefighter deaths related to structural and wildland firefighting based on a study of training regimens and available research on the reduction of emergency risks and accidents. The course also covers the testing and inspecting of water-based suppression systems.

Advisory: ENG 050 and MATH 050
CSU, Associate Degree Applicable

FIRE 061
FIRE APPARATUS AND EQUIPMENT

3 Units
Lecture: 3 hours

This course provides the student with information on driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 062
RESCUE PRACTICES
3 Units
Lecture: 3 hours

This course covers the fire company role in life saving, development and organization of rescue companies, rescue equipment, training for rescue service, and rescue practices and procedures.

Advisory: ENG 050
CSU, Associate Degree Applicable

FIRE 081
DRIVER OPERATOR I
2 Units
Lecture: 2 hours

This course reviews vehicle laws and driver responsibilities and provides information on emergency response procedures, apparatus and equipment maintenance procedures, and the maneuvering of fire apparatus through controlled driving exercises and in normal traffic conditions. This is a California State Fire Marshal Office approved course.

CSU, Associate Degree Applicable

FIRE 082
FIRE INVESTIGATION 1B
2 Units
Lecture: 2 hours

This course focuses on arson investigation. Topics studied will include evidence, fire deaths, interviewing, crime scene searches, motives, criminal laws, juvenile law, and procedures and intent. This is a California Fire Marshal Office approved course.

Prerequisite: Eligible for ENG 051 or
Corequisite: ENG 050
CSU, Associate Degree Applicable

FIRE 084
PUMP OPERATIONS
2 Units
Lecture: 2 hours

This course covers the types and design of fire pumps and the principles of pumping, including operating pumps under fire ground conditions. It also includes review of applied mathematics, hydraulic laws, and application of mental hydraulic calculations. This is a California State Fire Marshal Office approved course.

Prerequisite: Eligible for ENG 051 or
Corequisite: ENG 050
CSU, Associate Degree Applicable

FIRE 088
FIRE INVESTIGATION I
2 Units
Lecture: 2 hours

This course studies the national arson problem and the cost factors affecting the American public. Topics studied will include responsibilities of the fire inspecting officer, the nature and affect of ethical and unethical conduct, and the authority and responsibility the inspecting officer has to his/her profession.

Prerequisite: Eligible for ENG 051 or
Corequisite: ENG 050
CSU, Associate Degree Applicable

FIRE 089
FIRE PREVENTION 1A
2 Units
Lecture: 2 hours

This course studies specific fire protection practices recommended by the California State Fire Marshal's office. Topics studied will include the Fire Marshal's regulations as they pertain to compressed and liquefied gases, toxic materials, radioactive substances, explosives, building materials, codes, and the general prevention of private home and public building fires.

Prerequisite: Eligible for ENG 051 or
Corequisite: ENG 050
CSU, Associate Degree Applicable

FIRE 090
FIRE PREVENTION 1B
2 Units
Lecture: 2 hours

This course focuses on the codes, ordinances and statutes that pertain to fire prevention practices in California. Some topics of discussion include: building construction and occupancy, evacuation procedures, inspection reports, and processing plans. This is a California State Fire Marshal Office approved course.

CSU, Associate Degree Applicable

FIRE 091
FIRE COMMAND 1A
2 Units
Lecture: 2 hours

This course provides instruction and simulation time to the participants pertaining to the initial decision and action processes at a working fire. It includes areas of discussion on the fire officer, fire behavior, fire ground resources, operations, and management. This is a California State Fire Marshal Office approved course.

CSU, Associate Degree Applicable

FIRE 092
FIRE MANAGEMENT (SUPERVISION)
2 Units
Lecture: 2 hours

This course covers the basic skills that the company officer or potential company officer needs to effectively function as a supervisor of fire personnel in non-emergency settings. This is a California State Fire Marshal Office approved course.

CSU, Associate Degree Applicable

FIRE 093
FIRE INSTRUCTOR 1A
2 Units
Lecture: 2 hours

This is the first of a two course Fire Science Instructor series accredited by the State Board of Fire Services. Topics include: occupational analysis; course outlines; concepts of learning; levels of instruction; behavioral objectives; psychology of learning and includes students teaching demonstrations. This is a California State Fire Marshal Office approved course.

CSU, Associate Degree Applicable

FRENCH (FR)

For IGETC purposes, two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at CMC.

FR 001
ELEMENTARY FRENCH

5 Units
Lecture: 5 hours
Laboratory: 1 hour

This course introduces the student to the fundamentals of the French language and culture emphasizing development of the student's French language abilities and knowledge in understanding, speaking, reading, and writing. Elementary French includes an introduction to Francophone societies, history, and culture. Completion of FR 001A and FR 001B is equivalent to FR 001.

CSU, UC, Associate Degree Applicable

FR 001A
ELEMENTARY FRENCH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course introduces students to the fundamentals of the French language and culture. Students are lead to develop French language abilities and knowledge in understanding, speaking, reading and writing, including an introduction to Francophone societies, history, and culture. Completion of FR 001A and FR 001B is equivalent to FR 001.

CSU, UC, Associate Degree Applicable

FR 001B
ELEMENTARY FRENCH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course continues to engage students in the fundamentals of the French language and culture. Students' French language abilities and knowledge in understanding, speaking, reading, and writing are further developed including exposure to Francophone societies, history, and culture. Completion of FR 001A and FR 001B is equivalent to FR 001.

Prerequisite: FR 001A
CSU, UC, Associate Degree Applicable

FR 002
ELEMENTARY FRENCH

5 Units
Lecture: 5 hours
Laboratory: 1 hour

Elementary French FR 002 is a continuation of FR 001. This course is designed to present the fundamental essentials of the French language. It includes activities which help students develop functional fluency in understanding, speaking, reading, and writing within the context of the French way of life, society, culture, and history. Completion of FR 002A and FR 002B is equivalent to FR 002.

Prerequisite: FR 001 or FR 001B
CSU, UC, Associate Degree Applicable

FR 002A
ELEMENTARY FRENCH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

Elementary French FR 002A and FR 002B are a continuation of FR 001 or FR 001A and 001B. This two-semester sequence is the same as described in FR 002 and provides realistic meaningful communicative situations in the classroom so that students can develop communicative oral and written skills, gain understanding of how French functions as a language and learn about the francophone world and culture. FR 002A and 002B courses cover the same material as the full semester FR 002 course. Completion of FR 002A and 002B is equivalent to FR 002.

Prerequisite: FR 001 or FR 001B or one year of high school French or equivalent
CSU, UC, Associate Degree Applicable

FR 002B
ELEMENTARY FRENCH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

Elementary French FR 002A and 002B are a continuation of FR 001 or FR 001A and 001B. This two-semester sequence is the same as described in FR 002 and provides realistic meaningful communicative situations in the classroom so that students can develop communicative oral and written skills, gain understanding of how French functions as a language and learn about the francophone world and culture. FR 002A and FR 002B courses cover the same material as the full semester FR 002 course. Completion of FR 002A and FR 002B is equivalent to FR 002.

Prerequisite: FR 002A or one or two years of high school French or equivalent
CSU, UC, Associate Degree Applicable

GEOGRAPHY (GEOG)

GEOG 001
PHYSICAL GEOGRAPHY

3 Units
Lecture: 3 hours

This course examines the major features of the natural environment including land, water, air, and life forms. The relationship between humans and their natural environment is emphasized and map-reading skills are developed.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

GEOG 001L
PHYSICAL GEOGRAPHY LABORATORY

1 Unit
Laboratory: 3 hours

This course introduces the student to the methods and techniques used in the geographic study of the natural environment focusing on the earth's atmosphere, continents, oceans, and life forms. Students observe, record, and analyze this information both in class and on field trips in the local environment.

Corequisite: GEOG 001 or prior completion
CSU, UC, Associate Degree Applicable

GEOG 002
CULTURAL GEOGRAPHY

3 Units
Lecture: 3 hours

This course focuses on the distribution of and interrelationships between features of humankind's modern cultural environment. Among the topics discussed are world population, forms of livelihood, territoriality, urbanization, and material culture. Emphasis is also placed on the development of map-reading skills.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

GEOG 007
REGIONAL GEOGRAPHY
3 Units
Lecture: 3 hours

This course describes and explains the major cultural characteristics of the earth's diverse geographic regions. Emphasis is placed on the development of regional patterns through time and the processes responsible for the existing patterns. The development of map-reading skills is an essential aspect of this investigation.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

GEOG 010
GEOGRAPHY OF CALIFORNIA
3 Units
Lecture: 3 hours

This course is a study of the natural and cultural environments of California including its climate, topography, biogeography, economy, urbanization, and population diversity. Emphasis is placed on people and the environment, map interpretation and their changes over time. Both topical and regional formats are introduced.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

GEOLOGY (G)

G 001
PHYSICAL GEOLOGY
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course includes the study of the origin and composition of rocks and minerals; landscape development by water, ice, and wind; earthquakes; the Earth's interior; the nature of mountains and their development; the movement of continental and oceanic plates, and environmental aspects of geology. The laboratory portion includes 16 hours of local field trips and constitutes a practical application of aspects of the above subject areas.

Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

G 002
HISTORICAL GEOLOGY
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course investigates the formation and evolution of the Earth, including its oceans, atmosphere, and life; as traced mainly through the rock and fossil records. Included is the history of the science of geology. Basic geologic principles will be briefly reviewed.

Advisory: ENG 050
Prerequisite: G 001
CSU, UC, Associate Degree Applicable

G 004
GEOLOGY LAB
1 Unit
Laboratory: 3 hours

This lab is for those students who have previously taken Physical Geology (G 005) or the Earth Sciences (G 010) as a 3-units, no lab, lecture course. This lab constitutes a practical application in the classroom and in approximately 16 hours in the field of aspects of the physical geology/ environment geology subject areas.

Corequisite: G 001 or G 005 or G 010 or prior completion
Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

G 005
ENVIRONMENTAL GEOLOGY
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course surveys geologic hazards such as flooding, landslides, earthquakes, and volcanic eruptions that effect humanity and studies means by which they may be mitigated. Geologic resources such as groundwater, surface water, and soil are studied to assess supply, conservation practices, and contamination mitigation. Mineral, fossil fuel, and alternate energy resources are examined for potential and for environmental assessment of production and consumption. Land-use planning and environmental impact analysis integrate the foregoing. The laboratory portion applies, on a practical basis, aspects of the above in the classroom and in approximately 16 hours in the field.

Note: This course is suggested for students in any major which deals with human interactions with the physical environment, such as architecture, engineering, environmental studies city planning, natural resources, geology, and geography.

Advisory: ENG 050 and MATH 507
CSU, UC, Associate Degree Applicable

G 006
GEOLOGY OF CALIFORNIA
3 Units
Lecture: 3 hours

This course presents the physical and historical geology of the natural provinces of California. The mineral deposits, stratigraphic and rock units, tectonic structures, fossils, geomorphology, and environmental issues within each province are examined. One or more field trips are conducted.

Advisory: ENG 050 and MATH 507
CSU, UC, Associate Degree Applicable

G 007
INTRODUCTION TO GEOLOGY
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is a general survey of the fields of physical and historical geology. It is designed to give a broad general understanding and appreciation of the composition, structure, geologic processes, origin, and development of the Earth and its inhabitants. The laboratory portion provides hands-on experience with minerals, rocks, fossils, topographic maps, geologic maps, and structure sections. One required all-day field trip provides an opportunity to directly experience local physical and historical geology.

Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

G 008
GEOLOGY OF NATIONAL PARKS AND MONUMENTS
3 Units
Lecture: 3 hours

This course provides a survey of the physical and historical geology of National Parks and Monuments, particularly those in the western states, to illustrate the geologic evolution of the regions in which these parks occur. Surface shaping processes such as volcanism, plutonism, deformation, sedimentation, glaciation, and fluvial activity are studied, using slides and other visual materials. Optional field trip(s) may be conducted.

Advisory: ENG 050 and MATH 057
CSU, Associate Degree Applicable

G 010
THE EARTH SCIENCES

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is a general survey of the Earth Sciences of Geology, Oceanography, Meteorology, Climatology, and Astronomy. It is designed to provide a broad general understanding and appreciation of these sciences and to bring into perspective the uniqueness of our planet, the interrelationships of its systems, and the influences of humanity upon these systems. The laboratory portion studies aspects of each area on a practical, applied basis. Field trips emphasize study of local geology.

Advisory: ENG 050 and MATH 057
CSU, UC, Associate Degree Applicable

HEALTH EDUCATION (HE)

HE 001
PERSONAL & COMMUNITY HEALTH

3 Units
Lecture: 3 hours

This course consists of application of facts and attitudes to the maintenance of optimum health for the individual and society; effects of exercise, fatigue, and diet; emotional and mental well-being; drugs, alcohol, and tobacco; disease etiology and disease prevention; human reproduction and family; and safety in the modern world.

Distance Modality: Online, Hybrid
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

HEALTH SCIENCES (HS)

Registered Nursing: See page 134-136
Vocational Nursing: See page 142-143

HS 061
MEDICAL TERMINOLOGY

3 Units
Lecture: 3 hours

This course introduces medical terminology as used by all health service personnel, including medical doctors, dentists, nurses, respiratory therapists, physical therapists, EMTs, medical coders, and doctor's office assistants.

Distance Modality: Online, Hybrid
Prerequisite: ENG 050

HS 062
YOUR LIVING BODY

3 Units
Lecture: 3 hours

This course provides a basic overview of body structures and functions, correlated with discussion of the major diseases affecting each of the major systems.

Advisory: ENG 050

HS 063
INTRODUCTION TO MEDICAL ASSISTING

9 Units
Lecture: 6 hours
Laboratory: 9 hours

This course provides entry-level training for employment in medical offices or clinics. Instruction is provided in basic knowledge and skills needed for work in these areas, including an introduction to medication administration, preparation of patients for examination, and basic management skills.

Prerequisite: ENG 050 with a grade of "C" or better
Advisory: HS 062, HS 061, HS 065, and CIS 050

HS 064
NURSE ASSISTANT

6 Units
Lecture: 4 hours
Laboratory: 6 hours

This course includes basic nursing principles used in the care of clients in long term care facilities. The content addresses the basic needs of clients; concepts of ethics and confidentiality; techniques of communication; reporting and recording of observations and basic assessments; performance of special treatments, procedures, and skills required for client care. Successful completion of the course results in eligibility to take the state-approved test that leads to certification as a nursing assistant. Fingerprinting is required.

Advisory: ENG 050

HS 065
BASIC PHARMACOLOGY

3 Units
Lecture: 3 hours

This course provides an introduction to basic pharmacology. Content covers calculating dosages, using conversion tables, administering medication, and using drug reference materials. The actions, untoward actions, desired and undesired effects of commonly used drugs in the major classifications are presented.

Prerequisite: BI 022 and MATH 057
Associate Degree Applicable

HS 066
HOME HEALTH AIDE

2 Units
Lecture: 1.5 hours
Laboratory: 1.5 hours

This course expands on the content taught in the nursing assistant course to provide preparation for care of residents in home care settings. Content emphasizes personal care, basic communications, safety, meal planning, and maintaining a healthful environment.

Prerequisite: Current California C.N.A. license or Pass California C.N.A. Licensing Exam

HS 081
BASIC ARRHYTHMIAS

2 Units
Lecture: 2 hours

This course is designed for a person working with patients who require cardiac monitoring. It provides a review of anatomy and physiology of the heart. The normal and abnormal rhythms of the heart are studied with an emphasis on treatment for abnormal arrhythmias.

HS 082
INTERMEDIATE CARDIAC ARRHYTHMIAS

2 Units
Lecture: 2 hours

This course is designed for persons with knowledge and skills in basic arrhythmias interested in identifying and analyzing more complex arrhythmias. Emphasis is placed on how premature and escape rhythms affect cardiac output. Concepts associated with Ashman's phenomenon, fixed coupling, and the Action Potential curve's importance to arrhythmia identification and treatment are explored. Drug therapy and treatment to reestablish or maintain normal cardiac output are discussed.

Prerequisite: HS 081

HS 083
ADVANCED EKG: 12 LEAD

2 Units
Lecture: 2 hours

This course is designed for the clinicians with a basic knowledge of arrhythmias, and provides a review of anatomy and physiology, with emphasis on the heart vectors and changes that occur in vectors as a result of myocardial infarction. Emphasis is placed on interpreting a 12 lead EKG.

Prerequisite: HS 081

HS 098
NURSING SKILLS LAB
.5 Unit
Laboratory: 1.5 hours

This course provides opportunity for practice and mastery of nursing skills necessary for safe patient care. It uses multimedia materials, computers, and instructor assistance to improve the required skills and is directed to students needing review of nursing procedures. A credit/ no credit mark is awarded.

Corequisite: Enrollment in any health science/health education/health occupation course (except Registered Nursing - see N 098), hospital referred, or current occupational license in healthcare.
Advisory: ENG 050

HS 099
NURSING SKILLS LAB
1 Unit
Laboratory: 3 hours

This course provides opportunity for practice and mastery of nursing skills necessary for safe patient care. It uses multimedia materials, computers, and instructor assistance to improve the required skills and is directed to students needing review of nursing procedures. A credit/ no credit mark is awarded.

Corequisite: Enrollment in any health science/health education/health occupation course (except Registered Nursing - see N 099), hospital referred, or current occupational license in healthcare.
Advisory: ENG 050

HISTORY (HIST)

HIST 003
HISTORY OF WORLD CIVILIZATION PART I
3 Units
Lecture: 3 hours

This course is a broad study of the major elements of history from ancient times to the Renaissance. It is designed to develop understanding of institutions basic to world civilization.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

HIST 004
HISTORY OF WORLD CIVILIZATION PART II
3 Units
Lecture: 3 hours

This course is a broad study of the major elements of history from the 16th Century to the present. It is designed to develop understanding of institutions basic to world civilization.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

HIST 017
U.S. HISTORY THROUGH RECONSTRUCTION
3 Units
Lecture: 3 hours

This course is a survey of the political and social development of the United States from the discovery of America through the Reconstruction period.

Distance Modality: Online, Hybrid
CSU, UC, Associate Degree Applicable

HIST 018
U.S. HISTORY FROM RECONSTRUCTION TO PRESENT
3 Units
Lecture: 3 hours

This course is a survey of the political and social development of the United States from the Reconstruction Period to the present.

Distance Modality: Online
CSU, UC, Associate Degree Applicable

HIST 019
CALIFORNIA HISTORY
3 Units
Lecture: 3 hours

This course is a survey of California's heritage from its Native American origins through statehood to the present, focusing on the diverse populations and the political, economic and social forces that shaped California's development.

CSU, UC, Associate Degree Applicable

HOME ECONOMICS/NUTRITION (HEC)

HEC 013
GENERAL NUTRITION
3 Units
Lecture: 3 hours

This course is a study of the chemical composition of foods and their utilization by the body. Practical problems of nutrition and relationship of adequate diet to physical and mental health are covered.

Distance Modality: Online, Hybrid
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

JOURNALISM (J)

J 003A
NEWS REPORTING & WRITING
3 Units
Lecture: 3 hours

This is a beginning course in news writing that provides instruction and practice in the fundamentals of news reporting. It concentrates on the writing of news with an introduction into feature writing. Included in the course are such topics as interviewing, story organization and structure, the style and language of journalism, and journalistic law and ethics.

Distance Modality: Online, Hybrid, Instructional TV
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

J 010
MAGAZINE ARTICLE WRITING
3 Units
Lecture: 3 hours

A beginning writing course to provide instruction and practice in magazine article writing and a knowledge of current magazine markets. Concentration is on researching, interviewing, organizing, writing, and style.

Prerequisite: ENG 050
Associate Degree Applicable

MASS COMMUNICATION (MC)

MC 001
MASS MEDIA IN AMERICAN CULTURE
3 Units
Lecture: 3 hours

This course introduces students to the influences and contributions of the mass media in American popular culture. It traces the historical development of western culture and mass communication and focuses upon the interrelationship of the two. It is designed to enhance student awareness of the impact of the mass media in shaping mass culture.

Prerequisite: ENG 051
CSU, UC, Associate Degree Applicable

MC 003
TELECOMMUNICATIONS

3 Units
Lecture: 3 hours

This is an introductory course designed to acquaint students with telecommunications through a survey of the field's history, philosophy, legal aspects, networks, government regulations, programming, production sales, engineering operations, and future technological trends. Open to all students seeking a background in this rapidly changing field of electronic media.

Prerequisite: ENG 050
CSU, Associate Degree Applicable

MC 004
INTRODUCTION TO MEDIA ADVERTISING

3 Units
Lecture: 3 hours

This course introduces students to the field of media advertising and the role it plays in American society. Students will be given an historical overview of the field and will be introduced to advertising layout, design, and sales strategies.

Prerequisite: ENG 050
CSU, Associate Degree Applicable

MC 005
INTRODUCTION TO PUBLIC RELATIONS

3 Units
Lecture: 3 hours

This course offers students an overview of the public relations field with a practical approach to the handling and planning of public relations campaigns.

Prerequisite: ENG 050
CSU, Associate Degree Applicable

MATHEMATICS (MATH)

MATH 001A
CALCULUS

5 Units
Lecture: 5 hours

This course studies the meaning, computation and application of the derivative with an introduction to the integral. Topics include the definition of the derivative; limits; rules for differentiating polynomial, rational, exponential, logarithmic, inverse trigonometric, and root functions; application of the derivative; and an introduction to the definite integral. The course includes calculator and/or computer usage.

Prerequisite: Four years of high school mathematics, including trigonometry and geometry with a minimum grade of "B" in the fourth year, or MATH 012 with a grade of "C" or better.
CSU, UC, Associate Degree Applicable

MATH 001B
CALCULUS

5 Units
Lecture: 5 hours

This course studies the meaning, computation, and application of integration and infinite series. Topics include the definition of the definite integral, techniques of integration, applications of integration, first order separable differential equations, modeling exponential growth and decay, infinite series and approximation of functions using Taylor series with remainder.

Prerequisite: MATH 001A with a grade of "C" or better
CSU, UC, Associate Degree Applicable

MATH 002A
MULTIVARIATE CALCULUS

5 Units
Lecture: 5 hours

This course extends the concepts of differentiation and integration introduced in the first two semesters of calculus to functions of two or more variables. Topics include solid Euclidean geometry; vector algebra in 3 dimensions; line and surface integrals; multiple integration in rectangular, cylindrical and spherical coordinates, extreme values; parameterized space curves and surfaces; directional derivatives; gradients; Green's theorem; divergence theorem; and Stokes' theorems.

Prerequisite: MATH 001B with a grade of "C" or better
CSU, UC, Associate Degree Applicable

MATH 002B
LINEAR ALGEBRA

4 Units
Lecture: 4 hours

This course provides a careful development of the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Also covered is a thorough investigation of the properties of vectors in two, three, and R^n, dimensions, leading to the generalized notion of an abstract vector space. A complete treatment of vector space theory is presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra and included. The course includes calculator and/or computer usage.

Prerequisite: MATH 001B with a grade of "C" or better
CSU, UC, Associate Degree Applicable

MATH 002C
ORDINARY DIFFERENTIAL EQUATIONS4)

4 Units
Lecture: 4 hours

This course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. It introduces the theoretical aspects of differential equations, including establishing when solutions exist and techniques for obtaining solutions, including series solutions, singular points, Laplace transforms, and linear systems. The course includes calculator and/or computer usage.

Prerequisite: MATH 001B with a grade of "C" or better
CSU, UC, Associate Degree Applicable

MATH 005
TRIGONOMETRY

3 Units
Lecture: 3 hours

This is a course of study in the trigonometric functions with emphasis on periodic functions, trigonometric identities, solving trigonometric equations, graphical methods, inverse functions, solving triangles with applications including the law of sines and law of cosines. Students may also study vectors.

Prerequisite: MATH 040 with a grade of "C" or better; or four years high school math including two years of Algebra and one year of Geometry with a grade of "B" or better, or the equivalent.
CSU, Associate Degree Applicable

MATH 010
COLLEGE ALGEBRA

4 Units
Lecture: 4 hours

This is a function-oriented course which explores the concept of function and function notation. The course provides an in-depth investigation of polynomial, rational, exponential, and logarithmic functions, including their equations, graphs, and behavior. Other topics include the binomial theorem, conic sections, and matrices as they apply to systems of linear equations.

Prerequisite: MATH 040 with a grade of "C" or better; or four years of high school math including two years of Algebra and one year of Geometry with a grades of "B" or better, or equivalent
CSU, UC, Associate Degree Applicable

MATH 012
PRE-CALCULUS

5 Units
Lecture: 5 hours

This course studies the basic functions used in Calculus: polynomial, rational, root, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Topics include recognizing, graphing and solving equations involving these functions, working with function notation, rates of change, transformations of functions and applications.

Prerequisite: MATH 040 with a grade of "C" or better, or two years high school Algebra (Elementary and Intermediate Algebra) with a grade of "B" or better within the last 3 years, or math placement exam.
CSU, UC, Associate Degree Applicable

MATH 013
LIBERAL ARTS MATHEMATICS

4 Units
Lecture: 4 hours

This course is designed for the non-science liberal arts major transferring to a Cal State University (CSU) (for out-of-state transfers, check with your intended institution). Some CSU majors require specific math courses. It is advisable to research what math course is required. Survey topics may include the concept of proof (deduction and induction), set theory, logic, numeration and mathematical systems, number theory, geometry, basic trigonometry, counting methods, probability, graph theory, and voting apportionment.

Prerequisite: MATH 040 with a grade of "C" or better; or four years of high school math including two years of Algebra and one year of Geometry with grades of "B" or better, or equivalent.
CSU, Associate Degree Applicable

MATH 014
STATISTICAL METHODS

4 Units
Lecture: 4 hours

This course is an introduction to descriptive and inferential statistics. Students learn how to use measures of central tendency and dispersion among population samples to draw inferences about a population and to compare two or more populations. Discrete and continuous probability density distributions are analyzed including the binomial, normal, Student-t, chi-squared, and F-distributions. Confidence intervals for population means, proportions and variance are determined. Additional topics include regression and correlation analysis and techniques of hypotheses testing, including Analysis of Variance (ANOVA). The course includes calculator and/or computer usage.

Prerequisite: MATH 040 with a grade of "C" or better, or two years high school Algebra (Elementary and Intermediate Algebra) with a grade of "B" or better within the last 3 years, or math placement exam.
CSU, UC, Associate Degree Applicable

MATH 040
INTERMEDIATE ALGEBRA

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course focuses on solving problems using linear, quadratic and exponential models with an introduction to the concept of a function. Topics include evaluating, solving and graphing linear, quadratic and exponential functions; solving systems of linear equations; simplifying rational exponents; solving radical equations and quadratic inequities; and applications of these concepts.

Distance Modality: Online, Hybrid
Prerequisite: MATH 050 with a grade of "C" or better, or one year high school Algebra with a grade of "B" or better within the last three years, or math placement exam
Associate Degree Applicable

MATH 050
ELEMENTARY ALGEBRA

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is an introduction to the real number system and to the use of variable expressions and equations in problem solving. Topics include properties of the real numbers, arithmetic of variable expressions including polynomials and algebraic fractions, solving linear equations and inequalities in one variable, factoring, and an introduction to the Cartesian coordinate system.

Distance Modality: Online, Hybrid
Prerequisite: MATH 057 with a grade of "C" or better, or math placement exam
Associate Degree Applicable

MATH 056
BASIC ELECTRICAL / ELECTRONICS MATHEMATICS

3 Units
Lecture: 3 hours

This course provides instruction in basic mathematical formulas and applications used in the elementary electrical/electronic fields. It offers a review of algebraic operations in mathematics necessary for continued progress in electrical/electronics courses.

MATH 057
PRE-ALGEBRA

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course provides an understanding of, and competency in, the basic concepts of elementary arithmetic and basic algebra. Topics include adding, subtracting, multiplying and dividing whole numbers, integers, whole number exponents, decimals and fractions. Other topics include solving basic equations, an introduction to graphing and statistics, basic algebraic problem solving, solving simple right triangle problems using the Pythagorean Theorem, and properties of beginning algebra including the order of operations. Other topics are: ratios and proportions, percent, the metric system including conversion of units and elementary geometry concepts such as properties of geometric figures, perimeter, area and volume.

Advisory: RDG 050

MATH 097
MATHEMATICS SUPPLEMENTAL LAB

.5 Unit
Laboratory: 1.5 hours

Mathematics Supplemental Laboratory is an open entry/open exit environment that provides opportunities to develop mathematical skills, notation, and language for students enrolled in any mathematics or physics course. Emphasis is on one-on-one tutorial help for homework, audio visual aids, or computer assisted instruction. Students receive a credit/no credit grade.

Corequisite: Concurrent enrollment in any Math or Physics class

MATH 098
MATHEMATICS SUPPLEMENTAL LAB

1 Unit
Laboratory: 3 hours

Mathematics Supplemental Laboratory is an open entry/open exit environment that provides opportunities to develop mathematical skills, notation, and language for students enrolled in any mathematics or physics course. Emphasis is on one-on-one tutorial help for homework, audio visual aids, or computer assisted instruction. Students receive a credit/no credit grade.

Corequisite: Concurrent enrollment in any Math or Physics class

MUSIC (MUS)

MUS 005
HISTORY OF ROCK 'N' ROLL

3 Units
Lecture: 3 hours

This course is a survey of rock music. The focus is on the rock music, the musician, and the manner in which sociological, political, and economic conditions merged in the evolution of this musical art form.

Distance Modality: Online, Hybrid
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

MUS 010
INTRODUCTION TO MUSIC

3 Units
Lecture: 3 hours

This course is designed for the general college student and non-music majors. This course is a general survey of the development of music with emphasis on the esthetic, formal, and historical factors, correlated with parallel movements in the other arts.

Distance Modality: Online, Hybrid
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

MUS 012
FUNDAMENTALS OF MUSIC

3 Units
Lecture: 3 hours

This course is designed for the general college student and prospective elementary teachers. This course covers the study of the basic fundamentals of music; lines and spaces, notes and note values, meter, time signatures, modes, major and minor scales, key signatures, intervals and chords.

CSU, UC, Associate Degree Applicable

MUS 014
MUSIC HISTORY AND LITERATURE

3 Units
Lecture: 3 hours

This course focuses primarily on the major musical stylistic periods from 1750 to 2000. The evolution of Western art music from the end of the Baroque era until the end of the 20th century will be presented in context with contemporaneous social, political, artistic movements, and events.

Advisory: ENG 051
CSU, UC, Associate Degree Applicable

MUS 020A-D
INSTRUMENTAL CHAMBER ENSEMBLE

1 Unit
Lab: 4 hours

Students develop musical acuity by studying and performing representative works in music literature. Major genres of music studied will include the Renaissance, Baroque, Classical, Romantic, and Modern periods. Four hours rehearsal is required each week, as well as preparation for public performances.

Prerequisite: For MUS 020A – audition is required to determine if student is eligible for enrollment
Prerequisite: For MUS 020B – MUS 020A and ability to perform instrumental music at grade level two (2)
Prerequisite: For MUS 020C – MUS 020B, and ability to perform at grade level three
Prerequisite: For MUS 020D – MUS 020C, and ability to perform at grade level 3 1/2
CSU, UC Associate Degree Applicable

MUS 032
COLLEGE CHORUS

1 Unit
Laboratory: 3 hours rehearsal each week

This course provides students an opportunity to study and perform either one large scale or several short choral works. Rehearsals and public performances are required. Repeating the course provides additional skills and competency within the subject area. May be taken for a total of four times.

Prerequisite: Vocal audition is required to determine eligibility for enrollment
CSU, UC, Associate Degree Applicable

MUS 033A-D
SYMPHONIC BAND

1 Unit
Laboratory: 4 hours rehearsal each week

This course is a combination laboratory and performance organization dedicated to acquaint the student with a wide variety of symphonic band musical literature, composers and soloists.

Prerequisite: Audition is required to determine eligibility for enrollment
CSU, UC, Associate Degree Applicable

MUS 071A-D
JAZZ ENSEMBLE

1 Unit
Laboratory: 4 hours rehearsal each week

This course is a combination laboratory and performance organization designed to acquaint the student with a wide variety of jazz and swing compositions, arrangers, and soloists.

Prerequisite: Audition is required to determine eligibility for enrollment
CSU, UC, Associate Degree Applicable

MUS 078A
INTRODUCTION TO COMPUTERS AND MUSIC

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course is designed as an introduction to the history, theory, and practice of electronic music and the development of MIDI (Musical Instrument Digital Interface). Students receive "hands-on" experience using synthesizers, computers and computer music software. Students create original compositions and manipulate existing repertoire using electronic music techniques.

CSU, Associate Degree Applicable

MUS 078B
APPLICATIONS OF COMPUTERS AND MUSIC
3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides practical experience in MIDI (Musical Instrument Digital Interface) and its applications, with an emphasis on original composition and audio for multimedia projects. Students receive "hands-on" experience using synthesizers, microphones, audio mixers, audio processors, computers and computer music software. Students construct stylistic multimedia demonstrations like those used in the music, television, film and computer industry. Repeating this course provides additional skills and competency within the subject area. May be taken for a total of three times.

Prerequisite: MUS 078A
CSU, Associate Degree Applicable

NATURAL RESOURCES (NR)

NR 001
CONSERVATION OF NATURAL RESOURCES
3 Units
Lecture: 3 hours

This environmental science course encompasses a study of general ecological principles including: biological energy relationships, elemental cycles, population dynamics, limiting factors, biotic communities, and natural resources measurements. Environmental issues are examined from an ecological perspective and include such topics as: water quality, air pollution, energy resources, toxic chemicals, and human population growth. Emphases are placed on the effects of environmental problems upon all living organisms, and the role of human beings in reducing their impact on this planet.

Distance Modality: Online
Advisory: ENG 050
CSU, UC, Associate Degree Applicable

NR 001L
CONSERVATION OF NATURAL RESOURCES LABORATORY
1 Unit
Laboratory: 3 hours

A laboratory designed to supplement the Conservation of Natural Resources course by providing laboratory and field experiences in environmental subject areas.

Corequisite: NR 001 or prior completion
CSU, UC, Associate Degree Applicable

NR 002
INTRODUCTION TO FORESTRY
3 Units
Lecture: 3 hours

This course covers the history of forestry and the lumber industry including the forest resource, its management, conservation and utilization. Forestry terminology and the use of basic engineering equipment, along with job opportunities in public and private forestry, wildlife management, and related fields are discussed. Silviculture, dendrology, cruising, and scaling are studied.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

NR 002L
INTRODUCTION TO FORESTRY LAB
1 Unit
Laboratory: 3 hours

A lab designed to supplement the Intro to Forestry course and provide students with field experience in forestry. Areas of study include: fire prevention and suppression, forest measurement, timber harvesting and processing, tree identification, reforestation, and job opportunities.

Prerequisite: Prior or concurrent enrollment in NR 002
CSU, Associate Degree Applicable

NR 003
INTRODUCTION TO WILDLIFE MANAGEMENT
3 Units
Lecture: 3 hours

This course covers the principles of wildlife biology as related to wildlife management. Students will be introduced to basic skills involved in wildlife conservation, and develop an understanding of the relationships between wildlife, people, and outdoor recreation. Subjects to be covered include: basic ecological concepts; population dynamics; wildlife habitats and nutrition; wildlife identification and natural history; field methods; fish and game laws; and career opportunities.

Advisory: ENG 050
CSU, Associate Degree Applicable

PHILOSOPHY (PHIL)

PHIL 006
INTRODUCTION TO PHILOSOPHY
3 Units
Lecture: 3 hours

This course is a chronological and thematic survey of philosophy from the ancient Greek period to the contemporary era. The cultural environments and historical milieus of great thinkers are considered in order to enhance students' understanding and appreciation of traditional Western and non-Western philosophical concepts. By the application of major theories in the disciplines of ethics, metaphysics, epistemology, axiology, aesthetics, ontology, and social and political philosophy, students will confront problems in a way that will stimulate critical thinking and develop their analytical skills.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PHIL 008
PHILOSOPHY FROM ANCIENT TIMES TO RENAISSANCE
3 Units
Lecture: 3 hours

This course is a study of the historical and logical development of the principal assumptions upon which contemporary thought and activity are based. Focus will be on the ideas and their proponents as viewed within their historical contexts from ancient times to the Renaissance. Emphasis will be placed on those ideas which are as relevant to contemporary life and thought as they were in the past.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PHIL 009
PHILOSOPHY FROM RENAISSANCE TO PRESENT
3 Units
Lecture: 3 hours

This course is a study of the historical and logical development of the principal assumptions upon which contemporary thought and activity are based. Focus will be on the ideas and their proponents as viewed within their historical contexts from the Renaissance to the present. Emphasis will be placed on those ideas which are as relevant to contemporary life and thought as they were in the past.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PHIL 010
GENERAL LOGIC
3 Units
Lecture: 3 hours

This course introduces students to deductive and inductive reasoning; distinctions between arguments and explanations; considerations of truth, validity, and soundness as they pertain to argumentation; the syllogistic method; the structure and function of language; and Venn diagrams. Stress is placed upon the principles of sound argumentation and the identification of common formal and informal fallacies. Also emphasized are statistical reasoning and the scientific method.

Advisory: ENG 051 and RDG 051
CSU, UC, Associate Degree Applicable

PHIL 012
RELIGIONS OF THE WORLD
3 Units
Lecture: 3 hours

This course is an historical introduction to the world's religious philosophies – Hinduism, Jainism, Buddhism, Sikhism, Taoism, Confucianism, Shinto, Zoroastrianism, Judaism, Christianity, and Islam – with an examination of their original writings and subsequent commentaries.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PHIL 013
PERSPECTIVES ON DEATH AND DYING
3 Units
Lecture: 3 hours

This course introduces students to a broad array of themes associated with the death system in modern America, with major emphasis placed upon exploring death practices and attitudes of other cultures. Students consider both practical and philosophical aspects of death, including a critical analysis of such topics as developmental awareness of death; changes over time in mortality statistics; patient options in dealing with serious illness; funerals and body disposition; moral issues stemming from modern medical technology; suicide prevention; and the beliefs of various cultures about the afterlife.

Advisory: ENG 051
CSU, UC, Associate Degree Applicable

PHIL 014
INTRODUCTION TO ETHICS
3 Units
Lecture: 3 hours

This course provides students with an introduction to ethics, both as a philosophic discipline and as a practical foundation for making sound personal and professional decisions. Students will examine the concepts of right and wrong, and will apply moral values and moral reasoning to contemporary issues and the problems of daily life. A consideration of philosophers who have shaped the discipline will include a focus on such thinkers as Aristotle, Kant, and Mill.

Advisory: ENG 051
CSU, UC, Associate Degree Applicable

PHYSICAL EDUCATION (PE)

PE 001
FIRST AID AND SAFETY
3 Units
Lecture: 3 hours

This course includes theory and practice in immediate and temporary care given in case of accident or sudden illness, until service of a physician can be obtained. Upon successful completion, certificates in first aid and C.P.R. are awarded.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

PE 002
SPORTS OFFICIATING
3 Units
Lecture: 3 hours

This course provides instruction in the qualifications, duties, mechanics, and interpretations of officiating football, basketball, baseball, softball, track & field, cross country, volleyball, soccer, swimming, tennis, and golf. Emphasis is on NCAA and California Community College rules.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

PE 005
FOUNDATIONS OF COACHING
3 Units
Lecture: 3 hours

This course introduces the student to the profession of athletic coaching. Emphasis is on a comprehensive approach to the art and science of coaching including developing a coaching philosophy, sport psychology, sport pedagogy, sport physiology, and sport management. Subject matter includes coaching objectives and style, communication skills, principles of reinforcement, motivation, teaching sport skills, principles for training, team management and self-management.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

PE 008
INTRODUCTION TO HEALTH AND PHYSICAL EDUCATION
3 Units
Lecture: 3 hours

This course introduces the students to the professional field of physical education and health as related to the teaching and coaching profession. It brings forward the present curriculum involved with all levels of education, professional organizations, and literature requirements supporting this profession. It includes evaluation of teaching methods, strategies, and skill testing commonly needed by professional physical educators, coaches, and recreation leaders.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

PE 043
BADMINTON
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, advanced, and advanced instruction and practice in the skills, strategies, and rules of single and doubles badminton. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 044
BASEBALL, FALL
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in the skills and strategies of baseball. May be taken for a total of four times.

Prerequisite: Must be Varsity player/prospect or coach's permission
CSU, UC, Associate Degree Applicable

PE 045
BASKETBALL
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in skills, offensive and defensive strategies, and officiating of basketball. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 047
DANCE, BODY SCULPT AND TONE
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course is an exercise class for all students. It strengthens and targets specific problem areas of muscle weakness in the body. The students tone areas not normally strengthened with dancing or other aerobic exercise activities. By focusing on each specific area of the body, they increase their knowledge of injury prevention. Students also learn fundamental principles of physical fitness and their impact on lifelong health and wellness. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 048
BALLROOM DANCE (CLASSIC & LATIN)
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides the student with an appreciation for the art of ballroom dancing and assists the student in developing skills and techniques consistent with the standard of American Amateur Ballroom Dancing. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 050
DANCE, MODERN
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in modern dance techniques as a vehicle for creating original movement. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 051
DANCE, AEROBIC
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in principles, techniques, and practices of fundamental movements used in rhythmic activities, basic dance, and exercise conditioning, with special emphasis on aerobics. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 052
DANCE, AEROBIC (LOW IMPACT)
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in principles, techniques, and practices of fundamental movements used in rhythmic activities, basic dance, and exercise conditioning, with special emphasis on low impact aerobics. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 053
DANCE, MODERN (JAZZ)
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in jazz dance technique emphasizing optimum body placement and improved body mechanics and coordination. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 054
DANCE, STEP AEROBIC
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in principles, techniques, and practices of aerobic conditioning by means of "step" platforms. Toning and strength training exercises may also be used for upper and lower body strengthening. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 055
DANCE, TAP
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in basic tap dance steps and simple choreography forms for the improvement of coordination and physical conditioning. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 056
DANCE, BALLET
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

These courses provide beginning, intermediate, and advanced, instruction in ballet technique, vocabulary, history, current events, and appreciation of ballet as an art form. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 059
FLEXIBILITY AND AGILITY, SPORT PERFORMANCE
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction for students interested in improving "complete" physical strength, muscular endurance, anaerobic endurance, and increased muscular elasticity while reducing connective tissue injuries. Students will be required to participate in strenuous physical activity and testing. May be taken for a total of four times.

Prerequisite: Varsity player/prospect or coach's permission
CSU, UC, Associate Degree Applicable

PE 062
GOLF
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

These courses provide beginning, intermediate, and advanced instruction and practice in the skills and strategies of golf. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 063
GOLF: THE SHORT GAME
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in the skills and strategies of the short game of golf. The emphasis of this course is on golf shots up to 100 yards. May be taken for a total of four times.

Advisory: Some previous golf experience
CSU, UC, Associate Degree Applicable

PE 064
ADAPTED TENNIS
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

Tennis for students with disabilities. Offers instruction and practice in adapted skills, strategies, and rules of tennis designed to meet individual needs. May be taken as many times as desired.

Advisory: Designed for students with disabilities
CSU, UC, Associate Degree Applicable

PE 065
ADAPTED PHYSICAL ACTIVITY
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course for students with disabilities emphasizes the development of an individualized weight training and fitness program. Mobility assistants are provided. May be taken as many times as desired.

Advisory: Designed for students with disabilities
CSU, UC, Associate Degree Applicable

PE 067
ADAPTED GOLF
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides golf instruction and practice that is adapted for students with disabilities. May be taken as many times as desired.

Advisory: Designed for students with disabilities
CSU, UC, Associate Degree Applicable

PE 068
JOGGING, POWERWALKING, AND RUNNING
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in a progressive program of powerwalking and running as applied to health and fitness. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 071
KICKBOXING AEROBICS
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course is an aerobics class providing beginning, intermediate, and advanced instruction in principles, techniques, and practices of aerobic conditioning using the style and choreography of martial arts. Students learn proper body mechanics and footwork involved with the different styles of kicks, punches, blocking, elbows, and knee strikes. These exercises strengthen and condition all of the major muscle groups as well as providing an efficient workout on the cardiovascular system. Students also learn basic fitness principles associated with physical fitness and the benefits it has on a healthy lifestyle. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 074
PHYSICAL FITNESS, SPORT PERFORMANCE
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides the practical application of kinetic principles of HUMAN GAIT relative to upper and lower body extremity movement. It focuses on increased efficiency in vertical jump, lateral movement, forward and backward linear movement and its effects upon speed development and athletic performance improvement for the beginning, intermediate, and advanced varsity levels. Students are required to participate in vigorous physical activity, and test and measurement procedures. May be taken for a total of four times.

Prerequisite: Varsity player/prospect or coach's permission
CSU, UC, Associate Degree Applicable

PE 077
SELF-DEFENSE
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides an introduction to practical self-defense. Various aspects of the combined arts that are emphasized include history and philosophy of Asian fighting arts, nature of self-defense (origin-development-function), common sense self-defense, precautionary measures, psychology, physical conditioning, women and special problems, and aesthetic appreciation of form and motion. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 078
SELF-DEFENSE, MARTIAL ARTS
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction in martial arts with an emphasis on physical conditioning, sport, philosophy, and aesthetic appreciation of form and motion. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 079
SOCCER-TOUCH FOOTBALL
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in skills and strategies of soccer and touch football. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 080
SOFTBALL
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in skills, strategies and rules of softball. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 086
TENNIS
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in skills, strategies, and rules of tennis. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 091
VOLLEYBALL
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate, and advanced instruction and practice in skills, offensive and defensive strategies, and officiating of volleyball. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 094
WELLNESS AND FITNESS
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course is designed to provide instruction on basic fitness activities such as power walking, running, aerobics, flexibility, and strength training exercises along with basic fitness principles to support a healthy lifestyle. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 096
WEIGHT TRAINING
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides practical application of kinetic strength training principles for the beginner, intermediate, and advanced participant. Physical development and improvement are attained through the use of selected resistance machinery, free weight apparatus, and other selected physical conditioning methods. May be taken for a total of four times.

CSU, UC, Associate Degree Applicable

PE 098
YOGA
1 Unit
Lecture: .5 hour
Laboratory: 1.5 hours

This course provides beginning, intermediate and advanced instruction for individuals of all fitness levels who would like to increase their body/mind connection during movement. Students are introduced to the basic alignment and strength concepts of the body via the techniques of yoga. Special focus is placed on developing strength, endurance and correct body alignment in addition to flexibility and relaxation. This course may be taken a total of four times. Student can choose the credit/no credit or letter grade option.

CSU, UC, Associate Degree Applicable

PHYSICS (PH)

PH 001
INTRODUCTORY PHYSICS
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is an introduction to basic physical concepts, theories, and principles of physics. Topics include mechanics, properties of matter, heat, electricity and magnetism, waves, and modern physics.

Prerequisite: MATH 050 and ENG 051 with a grade "C" or better
CSU, UC, Associate Degree Applicable

PH 002A
COLLEGE PHYSICS
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This is the first semester of the two-semester calculus-based physics sequence designed for any majors seeking a degree in biological sciences and some physical sciences (check with advisor for applicability). Topics include 1, 2, and 3-dimensional motion, rotating systems, energy, momentum, equilibrium, gravitation, and fluid mechanics.

Advisory: ENG 051
Corequisite: MATH 001A
CSU, UC, Associate Degree Applicable

PH 002B
COLLEGE PHYSICS
4 Units
Lecture: 3 hours
Laboratory: 3 hours

This is the second semester of the two-semester calculus-based physics sequence designed for any majors seeking a degree in biological science and some physical sciences (check with advisor for applicability). Topics include simple harmonic motion, waves, thermodynamics, electricity, magnetism, and optics.

Prerequisite: PH 002A with a grade of "C" or better
Corequisite: MATH 001B
CSU, UC, Associate Degree Applicable

PH 004A
ENGINEERING PHYSICS
5 Units
Lecture: 4 hours
Laboratory: 3 hours

This is the first semester of the two-semester calculus-based physics sequence designed for any majors seeking a degree in engineering (including the computer fields) and some physical sciences (check with advisor for applicability). Topics include 1, 2 and 3-dimensional motion, rotating systems, energy, momentum, equilibrium, gravitation, and fluid mechanics.

Corequisite: MATH 001A
CSU, UC, Associate Degree Applicable

PH 004B
ENGINEERING PHYSICS
5 Units
Lecture: 4 hours
Laboratory: 3 hours

This is the second semester of the two-semester calculus-based physics sequence designed for any majors seeking a degree in engineering (including computer fields) and some physical sciences (check with advisor for applicability). Topics include simple harmonic motion, waves, thermodynamics, electricity, magnetism, and optics.

Prerequisites: PH 004A
Corequisite: MATH 001B
CSU, UC, Associate Degree Applicable

PH 005
COMPUTER PROGRAMMING I: C++ FOR THE SCIENCES AND ENGINEERING

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course is an introduction to the use of C++ for the solution of problems in the physical sciences and engineering through the structured implementation of algorithms on digital computers. The course emphasizes good programming principles and the development of substantial programs. It introduces the use of computer-based software development tools and systems. The course includes numerical methods such as histogramming, Monte-Carlo Methods for modeling experiments, statistical analysis, curve fitting, and numerical algorithms.

Prerequisite: MATH 001A, PH 002A or PH 004A
CSU, UC, Associate Degree Applicable

POLITICAL SCIENCE (PS)

PS 001
INTRODUCTION TO GOVERNMENT

3 Units
Lecture: 3 hours

This course is an introduction to the principles, organization, and politics of the federal government of the United States, including the study of state and local government. In considering government at the state level, specific emphasis is given to the government of the State of California. Throughout the course, current issues in American and state politics are stressed.

Distance Modality: Online, Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PS 002
INTRODUCTION TO COMPARATIVE GOVERNMENTS

3 Units
Lecture: 3 hours

This course is a comparative study of constitutional principles, governmental institutions, and political problems of selected governments. Particular attention is given to the contemporary problems of established and emerging nations.

CSU, UC, Associate Degree Applicable

PS 004
INTRODUCTION TO INTERNATIONAL RELATIONS

3 Units
Lecture: 3 hours

This course is an introduction to the nature of political relations among nations, including the basic factors that influence international relations. Emphasis will be placed on an examination of contemporary world politics and the emergence of terrorism as a political reality.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PS 055
PRINCIPLES OF STUDENT LEADERSHIP

2 Units
Lecture: 2 hours

Students will study parliamentary procedures, organizational structure, leadership styles, and theory. Those enrolled in the course will have opportunities to develop leadership skills, including communication, facilitation, problem solving, and conflict resolution through small group communication. A student who receives credit for this course cannot receive credit for STDV 055.

Advisory: RDG 050 and basic computer skills
CSU, Associate Degree Applicable

PSYCHOLOGY (PSY)

PSY 001
GENERAL PSYCHOLOGY

3 Units
Lecture: 3 hours

This course is an introduction to principles and theories governing animal and human behavior. Topics include developmental psychology, consciousness, psychotropic drugs, learning, motivation, emotion, intelligence, personality, stress, social psychology, psychotherapy, and psychological disorders.

Distance Modality: Online, Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

PSY 003
DEVELOPMENTAL PSYCHOLOGY

3 Units
Lecture: 3 hours

This is a life span course based on the behavioral patterns found at each level of normal human development, including the interrelationships of psychological, sociological, cognitive, and physical development from birth to senescence (old age). The implications for both personal development and professional practice are considered.

Advisory: ENG 003A and PSY 001
CSU, UC, Associate Degree Applicable

PSY 010
MARRIAGE AND FAMILY: PSYCHOLOGICAL ASPECTS

3 Units
Lecture: 3 hours

This course is designed to develop the student's repertoire of behavioral skills and an understanding of the principles governing marriage and family life. Included are areas such as communication, decision-making, human sexuality, divorce, single parenting, alternative family lifestyles and coping with stress. (A student who receives credit for PSY 010 cannot receive credit for SOC 010).

Distance Modality: Online, Hybrid
Advisory: PSY 001 and ENG 003A
CSU, Associate Degree Applicable

PSY 012
HUMAN SEXUALITY

3 Units
Lecture: 3 hours

This course examines the development and practice of human sexuality through exploration of the psychological, social, cognitive, and physiological dimensions of human behavior. Included is a review of the current research and the issues that are related to human sexuality and world we live in.

Advisory: ENG 003A and PSY 001
CSU, UC, Associate Degree Applicable

PSY 020
ADOLESCENT PSYCHOLOGY

3 Units
Lecture: 3 hours

This course is an introduction to both research and theory related to the growth and development of adolescents. Major areas emphasized include physical and psychological growth, adolescents and their families, the influence of peers, youth subcultures, sex roles, sexual behavior, self-image, and the impact of society at large. A special emphasis is placed on practical techniques useful to parents and professionals who work with adolescents.

Advisory: ENG 003A and PSY 001
CSU, Associate Degree Applicable

PSY 023
PSYCHOLOGY OF WOMEN

3 Units
Lecture: 3 hours

This course presents an overview of the social and personality development of the female. More specifically, the course examines the physiological and psychological differences characteristic of women, as well as those resulting from gender-linked cultural values.

Advisory: ENG 003A, PSY 001
CSU, UC, Associate Degree Applicable

PSY 033
PERSONAL AND SOCIAL ADJUSTMENT

3 Units
Lecture: 3 hours

This course examines the development of personality and places emphasis upon the problems of adjustment encountered in such areas as school, family, vocation, and community. In particular, the course focuses on understanding the causes of frustration and the process of learning adequate methods of coping in problematic situations.

Advisory: PSY 001
CSU, Associate Degree Applicable

READING (RDG)

RDG 001A
CRITICAL READING

3 Units
Lecture: 3 hours

This college freshman course focuses on critical reading and thinking. Students will read, analyze, and respond to college level readings of cultural and historical significance.

Advisory: ENG 051
CSU, Associate Degree Applicable

RDG 045
ADVANCED VOCABULARY

1 Unit
Laboratory: 3 hours

This is an advanced vocabulary course with an intensive words-in-context approach to vocabulary enrichment. Study of word parts and origins is included. It is designed for individualized independent study.

Prerequisite: ENG 051
Associate Degree Applicable

RDG 050
BASIC READING

4 Units
Lecture: 4 hours

This course is designed to provide extensive instruction and practice in basic reading, including vocabulary development, comprehension skills, and flexible reading rate. Study management skills are also introduced. Students may choose the credit/no credit or letter grade option.

Prerequisite: RDG 055 or appropriate test placement

RDG 051
COLLEGE PREPARATORY READING

3 Units
Lecture: 3 hours

This course continues to develop basic reading skills necessary for success in a college program of studies: vocabulary development, comprehension improvement, and reading rate flexibility, with continued study-skill development. Topics include vocabulary building, main ideas, supporting details, patterns of organization, purpose and tone, and argument. Literal as well as inferential meanings are stressed in order to develop critical thinking skills.

Prerequisite: RDG 050 or appropriate test placement

RDG 055
FOUNDATIONS OF READING

4 Units
Lecture: 4 hour

This basic course in vocabulary development and comprehension skills includes instruction on dictionary use, direct study of word meanings, analysis of word parts, examination of vocabulary in context, categorization of main idea and supporting details, and classification of patterns and relationships between sentences in paragraphs. The course is intended to assist students with the pronunciation, meaning, and use of words, and reading comprehension. Students may choose the credit/no credit or letter grade option.

Advisory: Communicate orally in English and understand spoken English moderately well.

REGISTERED NURSING (N)

All Registered Nursing courses are taught on a nine-week schedule.
See page 62 for additional information.

N 001A
NURSING FOUNDATIONS

4.5 Units
Lecture: 5 hours
Laboratory: 12 hours

In this first nine-week course, students will learn about the nursing process, principles of communication, nursing philosophy, the Neuman Model, legal and ethical issues, and principles of safety. While learning the theory of nursing practice, students will gain clinical experience by managing the care of one client. Such areas as common responses to stressors, nursing interventions to prevent or alleviate skin, mobility, nutrition, elimination, oxygenation and fluid and electrolyte balance problems are taught.

Prerequisite: Admission to Associate Degree Nursing Program.
CSU, Associate Degree Applicable

N 001B
CONCEPTS OF NURSING PRACTICE I

4.5 Units
Lecture: 4 hours
Laboratory: 15 hours

This nine-week course introduces concepts of mental health, promotion of wellness, cultural influences, and nursing roles. Students will continue their study of responses to stressors, nursing interventions to prevent or alleviate problems of oxygenation, fluid electrolyte balance, and begin the study of wound healing and pain. Administration of medications and care of the perioperative client are introduced. Students will gain clinical experience in managing the care of one or two clients.

Prerequisite: N 001A with a grade of "C" or better
CSU, Associate Degree Applicable

N 002A
MATERNAL–CHILD (PEDIATRICS) NURSING WITH FAMILY HEALTH

4.5 Units
Lecture: 5 hours
Laboratory: 12 hours

This course introduces students to nursing care related to the reproductive system and childbearing. Core concepts include health concerns related to the reproductive system across the life span for both men and women. This includes the physiological adaptations during antepartal, intrapartal, postpartal, neonatal periods, and pediatrics. Content includes health promotion, health screening with preventions/interventions for selected benign and malignant conditions, as well as family planning, domestic violence, various forms of abuse, and the nurse's responsibility. Nursing care theory for those receiving intravenous treatment is introduced and/or practiced.

Prerequisite: N 001B with a grade of "C" or better
CSU, Associate Degree Applicable

N 002B
CONCEPTS OF NURSING PRACTICE II AND GERONTOLOGICAL NURSING I

5 Units
Lecture: 5 hours
Laboratory: 15 hours

This course introduces students to primary, secondary and tertiary nursing care of sub-acute hospitalized clients. It also focuses on responses to stressors affecting the cardiovascular, respiratory, gastrointestinal, urinary/renal, metabolic systems, and problems associated with fluid and electrolyte balance. Students will earn about adult developmental life span tasks, as well as legal and ethical issues. Clinical experiences will consist of managing one to two sub-acute clients at varying adult life spans.

Prerequisite: N 002A with a grade of "C" or better
CSU, Associate Degree Applicable

N 003A
CONCEPTS OF NURSING PRACTICE III WITH GERONTOLOGICAL II

5 Units
Lecture: 5 hours
Laboratory: 15 hours

This course covers nursing care related to actual or potential health problems that affect adult or gerontological patients' normal lines of defense. Students will learn about intermediate health stressors involved in various life stages, including neurological and musculoskeletal dysfunctions, compromised immune systems and cancer.

Prerequisite: N 002A & N 002B with a grade of "C" or better, or admission to the Associate Degree Nursing Program via LVN to RN transition.
CSU, Associate Degree Applicable

N 003B
PSYCHIATRIC NURSING AND GERONTOLOGICAL NURSING III

4.5 Units
Lecture: 5 hours
Laboratory: 12 hours

This course introduces concepts of nursing and health care of the psychiatric and elderly client. The content includes mental health/illness, continued study of theories of aging with common disorders and treatment, the influence of societal attitudes, developmental tasks, cultural, legal/ethical issues and advocacy.

Prerequisite: N 002A & N 002B with a grade of "C" or better, or admission to the Associate Degree Nursing Program via LVN to RN transition.
CSU, Associate Degree Applicable

N 004A
CONCEPTS OF NURSING PRACTICE IV

5 Units
Lecture: 5 hours
Laboratory: 15 hours

This course teaches students secondary and tertiary nursing care of acutely-ill hospitalized clients experiencing responses to stressors affecting the neurological, cardiovascular, respiratory, gastrointestinal, urinary/renal, immunological systems. Students will learn about problems with fluid and electrolyte balance. Finally, students will acquire clinical experience in managing 3-4 high acuity clients and 1 client in the home health setting.

Prerequisite: N 002A & N 002B with a grade of "C" or better
CSU, Associate Degree Applicable

N 004B
NURSING 4B – NURSING MANAGEMENT, LEADERSHIP AND PRECEPTORSHIP

4 Units
Lecture: 3 hours
Laboratory: 15 hours

This course culminates the discussion and implementation of theoretical concepts and principles, facilitating the transition from the student role to the role of professional nurse. The course emphasizes leadership, management, various modes of health care deliveries systems, communication, conflict management, and legal and ethical issues relating to health care delivery.

Prerequisite: N 004A with a grade of "C" or better
CSU, Associate Degree Applicable

N 076A
NURSING TRANSITION I

1 Unit
Lecture: 1 hour

This is the first in a sequence of two courses that are designed to orient both the Licensed Vocational Nurse and generic Registered Nursing student attempting to transfer into the CMC Registered Nursing Program. It is designed for the generic nursing student who has successfully completed only the first semester of a generic Registered Nursing program at another college. This course is approved by the Board of Registered Nursing but falls outside the required Registered Nursing curriculum: **it is not required for the nursing degree**. Completion of this course is required for advanced placement in the Registered Nursing Program. Completion of this course determines the student's advanced placement in the Copper Mountain College Registered Nursing Program.

This course provides an introduction to the Registered Nursing scope of practice, Neuman Model, nursing process, principles of communication, functional health patterns, legal and ethical issues, fluid and electrolyte lab interpretations, and principles of safety. The course reviews nursing preventions and interventions to avert or alleviate problems with elimination, oxygenation, fluid and electrolyte balance, and other specific medical-surgical concerns. Common responses to stressors are illustrated.

Prerequisite: Completion of all courses required for admission to the Registered Nursing program with a grade of "C" or better and acceptance by the Nursing Program Director

N 076B
NURSING TRANSITION II

1 Unit
Lecture: 1 hour

This is the second in a series of two courses that are designed to orient both the Licensed Vocational Nurse and generic Registered Nursing student attempting to transfer into either the third or fourth semester of the CMC Registered Nursing program. It is designed for the generic nursing student who has successfully completed the first two semesters of a generic Registered Nursing program at another college. This course is approved by the Board of Registered Nursing but falls outside the required Registered Nursing curriculum: **it is not required for the nursing degree**. Completion of this course is required for advanced placement in the Registered Nursing program. Completion of this course determines the student's advanced placement in the Registered Nursing Program. Completion of this course determines the student's advance placement in the Copper Mountain College Registered Nursing Program. The course focuses on pain concepts, shock, and various pathophysiologies related to liver, genital, urinary, and kidney functions.

Prerequisite: N 076A

N 098
REGISTERED NURSING SKILLS LAB

.5 Unit
Laboratory: 1.5 hours

This course provides opportunity for practice and mastery of nursing skills necessary for safe patient care. It uses multimedia materials, computers, and instructor assistance to improve the required skills and is directed to students needing review of nursing procedures. A credit/ no credit mark is awarded.

Corequisite: Enrollment in RN program, hospital referred, or current license in registered nursing.
Advisory: ENG 050

N 099
REGISTERED NURSING SKILLS LAB

1 Unit
Laboratory: 3 hours

This course provides opportunity for practice and mastery of nursing skills necessary for safe patient care. It uses multimedia materials, computers, and instructor assistance to improve the required skills and is directed to students needing review of nursing procedures. A credit/ no credit mark is awarded.

Corequisite: Enrollment in RN program, hospital referred, or current license in registered nursing.
Advisory: ENG 050

SOCIOLOGY (SOC)

SOC 001
INTRODUCTION TO SOCIOLOGY

3 Units
Lecture: 3 hours

This course is a study of human behavior through an understanding of social organization: the role of culture, the development of personality, the function of group life and social institutions, the social processes and social interaction, factors in social change and collective behavior.

Distance Modality: Online, Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

SOC 002
SOCIAL PROBLEMS

3 Units
Lecture: 3 hours

This course is an application of sociological principles and concepts in an analysis of the family, religion, education, minorities, crime and delinquency, urban society, industry, and politics. Special attention is given to the interpretation of relevant quantitative data.

Advisory: SOC 001 and *ENG 003A*
CSU, UC, Associate Degree Applicable

SOC 003
FUNDAMENTALS OF STATISTICS

4 Units
Lecture: 3 hours
Laboratory: 3 hours

This course is a study of the fundamental concepts and techniques of statistical analysis that are encountered in all areas of application. Emphasis is placed upon precise mathematical reasoning, coupled with a thorough understanding of the rationale underlying the statistical methods employed. The course encompasses both descriptive and inferential concepts and techniques including the mathematical principles of probability theory and their application to parameter estimation and hypothesis testing. Published reports representative of the many ways in which statistical methods/data are employed in support of specific conclusions are examined with respect to both the appropriateness of their use and interpretation.

Prerequisite: MATH 040
Advisory: PSY 001 or SOC 001, and ENG 003A
CSU, UC, Associate Degree Applicable

SOC 004
SOCIOLOGICAL ANALYSIS AND CRITICAL THINKING

3 Units
Lecture: 3 hours

This course provides instruction in the principles of critical analysis and the composition of reasoned, written responses to a variety of social issues. These include issues falling within the scope of sociology, anthropology, economics, education, politics, criminology, biology and the physical sciences. Both deductive and inductive forms of reasoning are studied, including common formal and informal fallacies.

Distance Modality: Hybrid
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

SOC 010
MARRIAGE AND FAMILY: SOCIOLOGICAL ASPECTS

3 Units
Lecture: 3 hours

This course is designed to develop the student's repertoire of behavioral skills and an understanding of the principles governing marriage and family life. Included are areas such as communication, decision-making, human sexuality, divorce, single parenting, alternative family lifestyles and coping with stress. (A student who receives credit for SOC 010 cannot receive credit for PSY 010).

Distance Modality: Online, Hybrid
Advisory: SOC 001 and ENG 003A
CSU, Associate Degree Applicable

SOC 014
MINORITY GROUPS IN AMERICA

3 Units
Lecture: 3 hours

This is a comparative study of Latin American, Native American, Asian, African, and European groups in America as approached from the perspective of sociology. Focused study in on the minority groups in contemporary society.

Advisory: SOC 001 and ENG 003A
CSU, UC, Associate Degree Applicable

SPANISH (SPAN)

For IGETC purposes, two years of high school foreign language with grades of "C" or better is equivalent to one semester of foreign language at CMC.

SPAN 001
ELEMENTARY SPANISH

5 Units
Lecture: 5 hours
Laboratory: 1 hour

This course introduces the student to the fundamentals of the Spanish language and culture. Spanish 1 develops the students' Spanish language abilities and knowledge in understanding, speaking, reading, and writing within the context of the various Spanish-speaking societies, their history, and culture. Completion of SPAN 001A and SPAN 001B is equivalent to SPAN 001.

CSU, UC, Associate Degree Applicable

SPAN 001A
ELEMENTARY SPANISH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course introduces the student to the fundamentals of the Spanish language and culture. Students develop their Spanish language abilities and knowledge in understanding, speaking, reading, and writing within the context of the various Spanish-speaking societies, their history, and culture. Completion of SPAN 001A and SPAN 001B is equivalent to SPAN 001.

CSU, UC, Associate Degree Applicable

SPAN 001B
ELEMENTARY SPANISH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course continues the student's introduction to the fundamentals of the Spanish language and culture. Students continue to develop Spanish language abilities and knowledge in understanding, speaking, reading, and writing within the context of the various Spanish-speaking societies, their history, and culture. Completion of SPAN 001A and SPAN 001B is equivalent to SPAN 001.

Distance Modality: Online
Prerequisite: SPAN 001A
CSU, UC, Associate Degree Applicable

SPAN 002
ELEMENTARY SPANISH

5 Units
Lecture: 5 hours
Laboratory: 1 hour

This course continues to develop the fundamentals of the Spanish language and culture. Students develop their Spanish language abilities and knowledge in comprehension, speaking, reading, and writing within the context of various Spanish-speaking societies. Historical and cultural components are featured. Completion of SPAN 002A and SPAN 002B is equivalent to SPAN 002.

Prerequisite: SPAN 001 or SPAN 001B
CSU, UC, Associate Degree Applicable

SPAN 002A
ELEMENTARY SPANISH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course builds upon the material presented in SPAN 001 or SPAN 001B and further develops the conversational skills in confirming and correcting information and using correct response behaviors. Fluency in understanding, speaking, reading, and writing within the context of the Hispanic society, history, and culture is emphasized. Completion of SPAN 002A and 002B is equivalent to SPAN 002.

Distance Modality: Online
Prerequisite: SPAN 001 or SPAN 001B
CSU, UC, Associate Degree Applicable

SPAN 002B
ELEMENTARY SPANISH

3 Units
Lecture: 3 hours
Laboratory: 1 hour

This course builds upon the material presented in SPAN 002A and further develops the conversational skills in confirming and correcting information and using correct response behaviors. Fluency in understanding, speaking, reading and writing within the context of Hispanic society, history and culture is emphasized. Completion of SPAN 002A and SPAN 002B is equivalent to SPAN 002.

Distance Modality: Online
Prerequisite: SPAN 002A
CSU, UC, Associate Degree Applicable

SPAN 003
INTERMEDIATE SPANISH

4 Units
Lecture: 4 hours
Laboratory: 1 hour

This course strengthens the students' communication skills in the spoken and written language. Emphasis is on the customs and culture of the Hispanic world. Hispanic literature is introduced.

Prerequisite: SPAN 002 or SPAN 002B
CSU, UC, Associate Degree Applicable

SPAN 004
INTERMEDIATE SPANISH

4 Units
Lecture: 4 hours
Laboratory: 1 hour

This course expands the students' ability to communicate in Spanish. Emphasis is on the discussion of sociocultural selections and literature of the Hispanic-speaking world.

Prerequisite: SPAN 003
CSU, UC, Associate Degree Applicable

SPAN 005
ADVANCED SPANISH

3 Units
Lecture: 3 hours

This course is primarily designed for students of advanced Spanish proficiency and pre-Spanish majors as a transition toward upper division college work. Extensive readings in Spanish literature and culture are stressed with emphasis placed on composition and conversation, requiring intensive use of the Spanish language for enrichment of oral and writing abilities.

Prerequisites: SPAN 004
CSU, UC, Associate Degree Applicable

SPAN 006
ADVANCED SPANISH
3 Units
Lecture: 3 hours

This course is essentially the same as SPAN 005 with emphasis on Spanish-American literature and culture.

Prerequisite: SPAN 005
CSU, UC, Associate Degree Applicable

SPAN 008A-D
SPANISH CONVERSATION
3 Units
Lecture: 3 hours

This series of courses emphasizes contextual vocabulary building, and practical conversation topics, current events and cultural materials. Students may choose the credit/no credit grading option.

Prerequisite: SPAN 002 or three years high school Spanish
CSU, UC, Associate Degree Applicable

SPAN 010
SPANISH FOR THE BILINGUAL STUDENT
3 Units
Lecture: 3 hours

This course covers spelling, punctuation, the written accent, correct usage of verb tenses, proper sentence structure, and diction. Oral and written compositions will be part of the course. It aims to distinguish anglicisms and archaic expressions from standard language. It is designed for the Spanish speaker born in the U.S. who has never had formal instruction in Spanish.

Distance Modality: Online
CSU, UC, Associate Degree Applicable

SPAN 011
SPANISH FOR THE BILINGUAL STUDENT
3 Units
Lecture: 3 hours

This course is a continuation of SPAN 010. It is designed to improve the communicative skills in Spanish for the bilingual student both orally and in writing and to enhance her/his style of expression. It will include a practical application of all the verb tenses. Written compositions and oral presentations will be the main activities of the course.

Distance Modality: Online
Prerequisite: SPAN 010
CSU, UC, Associate Degree Applicable

SPAN 040A,B
SPANISH CIVILIZATION
3 Units
Lecture: 3 hours

This series of courses offers an introduction to the major currents and characteristics of Spanish culture as expressed through the centuries in literature, art, philosophy, music, and science. The courses are conducted in English and need not be taken in sequence.

Distance Modality: Online, Hybrid
Prerequisite: ENG 051
CSU, UC, Associate Degree Applicable

SPEECH (SP)

SP 001
INTRODUCTION TO HUMAN COMMUNICATION
3 Units
Lecture: 3 hours

The course enables students to understand and demonstrate interpersonal communication skills. Students focus on knowledge of communication theories, self concept, methods of resolving conflict, issues of human perception, nonverbal communication and improvement of listening skills. Significant writing and research assignments are an integral part of the course.

Distance Modality: Online, Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

SP 002
ORAL INTERPRETATION OF LITERATURE
3 Units
Lecture: 3 hours

This course encourages student growth in the comprehension, analysis, and evaluation of all major forms of literature; prose, poetry, and drama. The study of literary genres, styles of composition, techniques of characterization, approaches to literary criticism, performance skills, and editing techniques are included. The course provides students with an opportunity to synthesize classroom material through performance and presentation.

Advisory: ENG 051
CSU, UC, Associate Degree Applicable

SP 004
PUBLIC SPEAKING
3 Units
Lecture: 3 hours

This course emphasizes theory and the practice of basic techniques for successful public communication. Students learn to develop an effective interpersonal style of public communication. Informative, expository, persuasive, extemporaneous, and impromptu forms of speaking are covered.

Distance Modality: Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

SP 005
GROUP DISCUSSION AND LEADERSHIP
3 Units
Lecture: 3 hours

This course provides students the opportunity to examine and practice the basic principles of group interaction. Students focus on leadership, use of power, physical environment, conflict resolution, conformity, group change and growth.

Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

SP 007
DECISION MAKING AND ADVOCACY
3 Units
Lecture: 3 hours

This course focuses on the process of decision making as it relates to attitudes, values and cultural beliefs. The course covers argumentation skills, persuasion, and the effective use of evidence. Students learn these skills through practice and the analysis of media, propaganda, as well as current and historical political speeches.

Distance Modality: Online, Hybrid
Advisory: ENG 003A
CSU, UC, Associate Degree Applicable

SP 015
INTERCULTURAL COMMUNICATION

3 Units
Lecture: 3 hours

This course focuses on the communication behaviors and values common to all cultures and on the differences that insulate and divide people of one culture from others. The study leads to a better understanding of domestic traditions, an increased appreciation of the behaviors of others, and an awareness of more effective methods of communication.

Distance Modality: Online, Hybrid
Prerequisite: ENG 003A
CSU, UC, Associate Degree Applicable

STUDENT DEVELOPMENT (STDV)

STDV 010
CAREERS IN TEACHING

1 Unit
Lecture: 1 hour

This course provides students with an overview of the teaching profession. The course surveys the history of the teaching profession, nature of the work, career options, academic preparation, credentialing, and supply and demand for teachers. Career assessments and goal setting principles are utilized to help students formulate an educational plan. Students are required to complete a field based assignment requiring visitation to an approved educational institution. The course is designed for students considering a career in teaching.

Advisory: ENG 050
CSU, Associate Degree Applicable

STDV 049
CAREER DEVELOPMENT

1 Unit
Lecture: 1 hour

This group guidance course assists students in the process of life planning and career decision making. The focus on student self-assessment of individual needs, personality, interest, abilities, values, and the exploration of career information provides students with an on-going system for implementation of career goals.

STDV 050
SKILL DEVELOPMENT AND EDUCATIONAL DECISION MAKING

.2 Unit
Lecture: .2 hour

This course provides students with information on and understanding of their abilities and skill development, enabling them to make insightful decisions regarding education plans and career choices.

STDV 051A
COLLEGE SURVIVAL SKILLS

2 Units
Lecture: 2 hours

This course helps students develop effective techniques for advising their peers to gain accurate and more extensive knowledge of the opportunities available to CMC students. Students learn college survival skills in addition to referral resources. Students also learn skills to serve as peer advisors.

STDV 052
RE-ENTRY ORIENTATION

2 Units
Lecture: 2 hours

This course assists the re-entry students in developing positive attitudes towards personal growth. Students also learn to make a successful transition to the community college.

STDV 053
STRATEGIES FOR COLLEGE TRANSFER

1 Unit
Lecture: 1 hour

This course provides students with a concrete plan for understanding and succeeding in transferring to a four-year college or university. Topics include the following: identifying long-term educational and career goals, selecting a transfer institution and completing applications for transfer admission.

Prerequisite: ENG 050

STDV 054
HUMAN POTENTIAL SEMINAR

1 Unit
Lecture: 1 hour

This course assists students in improving self-esteem. Students learn specific techniques to overcome self-defeating behaviors. Topics include becoming more self affirmation, self-motivation, self determination and learning to be empathic.

STDV 055
PRINCIPLES OF STUDENT LEADERSHIP

2 Units
Lecture: 2 hours

Students will study parliamentary procedures, organizational structure, leadership styles, and theory. Those enrolled in the course will have opportunities to develop leadership skills, including communication, facilitation, problem solving, and conflict resolution through small group communication. A student who receives credit for this course cannot receive credit for PS 055.

Advisory: RDG 050 and basic computer skills
CSU, Associate Degree Applicable

STDV 056
PEER MENTORING

.5 – 1 Unit
Lecture: .25 – .5 hour
Laboratory: .25 – .5 hour

This course provides training, practicum and applied projects necessary for success in Level 1 Peer Mentoring. If a student already has Level I Tutor certification, s/he can add 5 hours of peer mentor training for Peer Mentoring certification at Level 1. For someone who has not completed Tutor Training, 15 hours of training will be required. A student may add this course after formal registration and an interview.

Prerequisite: One semester completed at CMC, two references from CMC certificated staff, GPA of 3.0 or higher, and an interview

STDV 060
COLLEGE SUCCESS SKILLS

1 Unit
Lecture: 1 hour

This course introduces first-time college students to the information and skills necessary for success in college. Course topics include an overview of higher education, college enrollment procedures and policies, student support services, study skills and an introduction to transfer and career development. Students develop realistic educational plans consistent with their educational goals.

STDV 060A
ORIENTATION TO COLLEGE

.5 Unit
Lecture: .5 hour

This is a course to assist the first-time college student. The course includes college enrollment procedures, development of basic educational survival skills, help in interpretation of Copper Mountain College Assessment Test, and help in formulating a realistic long-range educational plan.

STDV 062
INTRODUCTION TO SCHOLARSHIPS

1.5 Unit
Lecture: 1 hours
Laboratory: 1.5 hours

This course introduces students to books, software and Internet sites that offer scholarships. Instruction is given on writing a personal statement, developing a scholarship résumé, requesting materials and letters of recommendation, completing application forms and creating appropriate thank you letters. Students are guided on setting up a system of organization of materials. Students may choose the credit/no credit grading option.

Advisory: Basic knowledge of the Internet and basic word processing.

STDV 065
FOUNDATIONS OF COLLEGE SUCCESS

3 Units
Lecture: 3 hours

This course provides in-depth exploration of the information and skills necessary for success in college. Course topics include self assessment and goal setting, study skills for math, reading and writing, time management and financial planning. Students develop realistic educational plans consistent with their educational goals.

THEATRE ARTS (TA)

TA 001
INTRODUCTION TO THEATRE

3 Units
Lecture: 3 hours

This course is designed as a general survey of the theory, history, and practice of theatre art from its origins to the present time. The study includes the elements of drama; historic structures of the theatre; characteristic types of plays; the contribution of the director, actors, designers, and contemporary production techniques.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

TA 002A
ACTING I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course provides basic instruction in the skills by which actors develop awareness of their senses, relationship to the world around them, and responsibility to the art form. Exercises focus on developing awareness of one's values and feelings.

Advisory: ENG 050
CSU, UC, Associate Degree Applicable

TA 002B
ACTING I

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course continues the progression of skill levels by which actors develop awareness of their senses, relationship to the world around them, and responsibility to the art form. Exercises focus on translating these values into characterization.

Prerequisite: TA 002A
CSU, UC, Associate Degree Applicable

TA 003A
ACTING II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course is designed to develop actors' artistic skills in character study, script breakdown and styles. Styles to be analyzed and executed include Realistic, Naturalistic, Shakespearean, Chekhovian, Brechtian, Romantic, poetic and Restoration.

Prerequisite: TA 002B
CSU, UC, Associate Degree Applicable

TA 003B
ACTING II

3 Units
Lecture: 2 hours
Laboratory: 3 hours

This course is designed to continue the development of actor's artistic skills in character study, script breakdown and styles. Styles to be analyzed and executed include Realistic, Naturalistic, Shakespearean, Chekhovian, Brechtian, Romantic, poetic and Restoration.

Prerequisite: TA 003A
CSU, UC, Associate Degree Applicable

VOCATIONAL NURSING (VN)

See page 63 for additional information.

VN 001
VOCATIONAL NURSING I

5 Units
Lecture: 5 hours

This course introduces concepts related to the role of the vocational nurse, basic legal and ethical considerations, and communication and confidentiality. Using a nursing process format, the basic skills that maintain optimum wellness are presented. A foundation in normal growth, development, and nutrition are included with an emphasis on the special needs and health care concerns of the geriatric client. Students are introduced to alterations in the integumentary system.

Prerequisite: Admission to the program; BI 022, BI 023, and ENG 051
Corequisite: VN 001L, HS 065, if not previously completed
Associate Degree Applicable

VN 001L
VOCATIONAL NURSING I LABORATORY

4 Units
Laboratory: 12 hours

This course provides an opportunity for the practice and application of skills needed to meet the geriatric clients' basic needs and the maintenance of optimum wellness. Students care for clients with common alterations in the function of the integumentary system. Learning experiences are provided in the on-campus lab and in the skilled nursing facilities. Emphasis is placed on introduction to the nursing process and on client assessment.

Prerequisite: Admission to the program; ENG 051, BI 022, BI 023
Corequisite: VN 001 and HS 065, if not previously completed
Associate Degree Applicable

VN 002
VOCATIONAL NURSING II

9 Units
Lecture: 9 hours

Building on the concepts presented in VN 001, this course discusses content related to alteration in function of the musculoskeletal, respiratory, cardiac, peripheral-vascular, endocrine, upper and lower gastrointestinal, urinary, reproductive, and sensory/neurological systems, including cerebral vascular alterations. Students are also presented information related to the client with alterations in function related to surgery.

Prerequisite: VN 001, VN 001L, HS 065
Corequisite: VN 002L, PSY 003, if not previously completed
Associate Degree Applicable

VN 002L
VOCATIONAL NURSING II LABORATORY

7 Units
Laboratory: 21 hours

This course provides opportunity to care for clients with alteration in the function of the musculoskeletal, respiratory, cardiac, peripheral-vascular, endocrine, upper and lower gastrointestinal, urinary, reproductive, and sensory/neurological systems, including cerebral vascular alterations. Students also care for clients with alterations in function related to surgery. Emphasis is placed on the nursing process and on client assessment.

Prerequisite: VN 001, VN 001L
Corequisite: VN 002, PSY 003, if not previously completed
Associate Degree Applicable

VN 003
VOCATIONAL NURSING III

9 Units
Lecture: 9 hours

A continuation of VN 001 and 002, this course introduces concepts of leadership and management in vocational nursing. Students learn the care of clients, maintaining clients' health during child bearing, care of the hospitalized child, and care required by clients with alteration in the function of the immunological system and those experiencing abnormal cell growth. Acute alterations of all systems are reviewed with emphasis on the pediatric client.

Prerequisite: VN 002, VN 002L
Corequisite: VN 003L
Associate Degree Applicable

VN 003L
VOCATIONAL NURSING III LABORATORY

7 Units
Laboratory: 21 hours

This course provides opportunity to practice basic skills in leadership and management, to care for clients and maintenance of health during child bearing. Students also care for the hospitalized child and clients with alteration of function of the immunological system, those experiencing abnormal cell growth, and clients of all ages with acute alterations of all systems.

Prerequisite: VN 002 and VN 002L
Corequisite: VN 003
Associate Degree Applicable

WORK EXPERIENCE/GENERAL (WEG)

WEG 094
CAREER DEVELOPMENT PRINCIPLES

1 Unit
Lecture: 1 hour

This course assists students with basic methods of career decision making. Students learn techniques to become productive employees and to explore their career potential through self-assessment and career information.

WEG 095A-C
WORK EXPERIENCE, GENERAL

1-3 Units
Lecture: 1-3 hours

This work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes, and skills, so as to enable them to become productive employees. This course also provides students with career awareness for jobs. The course may serve as a preparatory program for later participation in vocational work experience. Credit may be accrued at the rate of one to three units per semester, for a maximum of six units. This type of work experience is available to students whose jobs are not related to their college major.

Corequisite: Must be enrolled in 7 or more units of credit including work experience
CSU, Associate Degree Applicable

WORK EXPERIENCE/VOCATIONAL (WEV)

WEV 094
CAREER PLANNING PRINCIPLES

1 Unit
Lecture: 1 hour

This course assists students with basic strategies for successful employment. Students explore their career potential through self-assessment and career information. Strategies to enhance students' employment success include job search, completing applications, preparing resumes, and interview techniques.

WEV 095A-D
WORK EXPERIENCE, OCCUPATIONAL

1-4 Units
Lecture: 1-4 hours

This vocational work experience course of supervised employment is designed to assist students to acquire desirable work habits, attitudes and skills so as to enable them to become productive employees. This course also provides students with career awareness for jobs and may be required as an internship in a vocational program of study. Credit may be accrued at the rate of one to four units per semester for a maximum of sixteen units. This type of work experience is available to students who are either volunteers or employees in vocational fields related to their college major.

Corequisite: Must be enrolled in 7 or more units of credit including work experience
Associate Degree Applicable