ADMINISTRATION OF JUSTICE

Division: Humanities, Social Sciences, and Mathematics

AJ-101  Administration of Justice
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course covers the history and philosophy of administration of justice in America as well as recapitulation of the system identifying the various sub-systems and their relationships. Theories of crime, punishment, ethics, education and training for professionalism in the system are explored. (GR)

AJ-102  Criminal Law
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
This course covers concepts of criminal law: historical development, philosophy of law, and constitutional provisions. Also covered will be classifications of crime and their application to the system of administration of justice. In addition, the course covers legal research, study of case law, methodology, and concepts of law as a social force. (GR)

AJ-104  Criminal Evidence
54.00 hrs lecture
Units: 3.00
Advisory: ENGL-101A
Accepted For Credit: CSU
This course covers the legal aspects of evidence. The origin, development, philosophy, and constitutional basis of evidence, along with constitutional and procedural considerations affecting arrest, search and seizure, kinds and degrees of evidence, and rules governing admissibility are studied. Judicial decisions interpreting individual rights and case studies are used to interpret the material. (GR)

AJ-106  Criminal Procedure
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
This course covers the principles and procedures of the justice system. The course is an in-depth study of the role and responsibilities of each segment within the Administration of Justice system – law enforcement, judicial, and corrections. (GR)

AJ-107  Criminal Investigation
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
This course covers the nature of investigation, crime scene search and recording, interviews and interrogation, sources of information, case preparation, and investigative techniques in specific crimes. (GR)

AJ-108  Introduction to Forensic Anthropology
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: ANTH-108
Advisory: ENGL-151B and ENGL-163
Accepted For Credit: CSU
This course introduces the field of forensic anthropology through a study of the history and methods of forensic anthropology and the role it plays in the medicolegal system. Topics include the human skeletal system, forensic archaeology, recovery and techniques for analyzing human skeletal remains. (GC)

AJ-115  Cyber Crime
54.00 hrs lecture, 18.00 hrs lab
Units: 3.00
Advisory: ENGL-101A
Accepted For Credit: CSU
This course will give students background in the history and terminology of computer crimes. The investigation of computer crimes and the forensic processing of seized computer data while safeguarding the constitutional rights of individuals will be examined. (GR)

AJ-116  Criminal Forensics
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
This course covers training of crime laboratory technicians in photography, scientific analysis, identification and comparison of physical evidence. Emphasis is placed on techniques and tests involved in cases of alcohol and drug intoxication and identification, blood types, fingerprints, ballistics, explosives, ultraviolet techniques, tool marks, and questioned documents. (GR)

AJ-117  Police and Society
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course involves an in-depth exploration of roles of AJ practitioners and their agencies. Through interaction and study, Administration of Justice students will become aware of interrelationships and role expectations among various agencies and the public. Emphasis is placed on the professional image of the Administration of Justice system and development of positive relationships between members of the system and the public. (GR)

AJ-118  Criminology
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course studies human behavior and the reasons and motivations why people commit crimes. It will also examine the nature and extent of crimes as well as causes and prevention of criminality. (GR)

AJ-119  Murder in America
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: PSY-104
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
This course surveys the psychological and criminological aspects of murder in America, including serial killers, mass murderers, and terrorism. (GR)
AJ-120  Report Writing for Law Enforcement and the Administration of Justice  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This course will provide pre-service students with an introduction to the field of report writing for law enforcement and the Administration of Justice system. (GR)

AJ-121  Constitutional Law and the United States  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: PS-106  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This course examines the development of judicial review and the evolving role of the U.S. Supreme Court through analysis of landmark decisions of the Court. In particular, this course will focus on a theoretical discussion exploring the plurality of methods of constitutional interpretation used by justices in the past and present. (GC)

AJ-123  Terrorism  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This course examines basic information about the structure and nature of domestic and international terrorism and the roles of state and local law enforcement in national defense. (GR)

AJ-131  Juvenile Justice  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This course covers causes and forms of juvenile delinquency, the handling of juvenile offenders and victims, the prevention and repression of juvenile delinquency, the diagnosis and referral of juvenile offenders, the organization of community resources, and juvenile law and juvenile court procedures. (GR)

AJ-132  Civil Law  
36.00 hrs lecture  
Units: 2.00  
Advisory: Eligible for ENGL-101A  
This course covers the essentials of non-criminal law as it relates to contracts, personal and property rights, torts, marriage and family relations, and the civil action. This course also covers obtaining and enforcing emergency protective restraining orders. (GR)

AJ-135  Drug Enforcement  
36.00 hrs lecture  
Units: 2.00  
Advisory: Eligible for ENGL-101A  
This course covers the identification of narcotic and dangerous drugs, the users of drugs and their supply, the law as an agency of drug control, investigation and processing of drug violations, and social solutions to the drug problems. (GR)

AJ-140  POST PC 832 Laws of Arrest  
40.00 hrs lecture  
Units: 2.00  
This course is POST certified as 40 hours PC 832 Laws of Arrest for code enforcement vocations. This course covers professionalism for code enforcement officers, basic legal concepts, the laws of evidence and investigative techniques, and unarmed defense and handcuffing techniques. The course is principally directed at individuals who deal with members of the general public in their regular occupation and who can be expected to enforce code violations by issuing citations, if necessary. Repeatable = 2 times (CR)

AJ-141  POST PC 832 Basic Firearms Qualification  
10.00 hrs lecture, 14.00 hrs lab  
Units: 1.00  
Prerequisite: Students must pass a background fingerprint check through the California Department of Justice at their own expense. The clearance letter must be provided to the Coordinator before entrance to the firing range. This requirement is California State Law.  
This course is the basic POST (Police Officer Standards and Training) certified 24-hour firearms training with qualification certificate upon completion. Successful completion of this course will allow the student to enter any enforcement type vocation, for instance, code inspectors, such as park rangers, building inspectors, animal control officers, community service officers, probation officers, security officers, or firefighters anywhere in the State of California. Repeatable = 3 times. (CR)

AJ-144  Leadership Skills Development  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
This course is designed to teach skills needed to create future leaders and supervisors for the public safety sector. Emphasis is not to teach students about supervision, but about leadership, and the differences between the two. (GR)

AJ-195A1  Work Experience Education – Vocational  
75.00 hrs lab  
Units: 1.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

AJ-195A2  Work Experience Education – Vocational  
150.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

AJ-195A3  Work Experience Education – Vocational  
225.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

AJ-195A4  Work Experience Education – Vocational  
300.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)
**AIR FORCE**

Division: Fine Arts, Business, and Communication Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>AF-101A</td>
<td>Foundations of the U.S. Air Force</td>
<td>22.50 hrs lecture, Units: 1.00. Accepted For Credit: CSU. Today’s Air Force officer and the Air Force as a whole. (GR)</td>
</tr>
<tr>
<td>AF-101B</td>
<td>Foundations of the U.S. Air Force</td>
<td>18.00 hrs lecture, 18.00 hrs lab, Units: 1.00. Accepted For Credit: CSU. Today’s Air Force officer and the Air Force as a whole. (GR)</td>
</tr>
<tr>
<td>AF-102A</td>
<td>The Evolution of the U.S. Air Force</td>
<td>22.50 hrs lecture, Units: 1.00. Accepted For Credit: CSU. Introduction to ethics, values, leadership and leadership problems, and communication skills. (GR)</td>
</tr>
<tr>
<td>AF-102B</td>
<td>Evolution of the U.S. Air Force</td>
<td>36.00 hrs lecture, Units: 2.00. Accepted For Credit: CSU. Introduction to ethics, values, leadership and leadership problems, and communication skills. (GR)</td>
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**ALLIED HEALTH**

Division: Health Sciences and Environmental Studies

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>AH-110</td>
<td>Medical Terminology</td>
<td>72.00 hrs lecture, Units: 4.00. Advisory: Eligible for ESL-184RW; ENGL-162; SPCH/ESL-150 or SPCH/ESL-151. Accepted For Credit: CSU. This course is an introduction to medication terminology as used in the health professions. It provides opportunities for practical application of medical terminology and further development of skill in analyzing components of medical terms and building a medical vocabulary applicable to specialties of medicine. Course content includes anatomical and physiological terminology; basic structure, prefixes, suffixes; combining forms; abbreviations, clinical procedures, laboratory and diagnostic tests related to each body system. (GR)</td>
</tr>
<tr>
<td>AH-114</td>
<td>Laboratory and Diagnostic Tests</td>
<td>18.00 hrs lecture, Units: 1.00. This course is designed for health science students and RN practitioners. Students will learn the purpose of various lab and diagnostic tests. Using clinical case studies, test results will be presented and analyzed. Not applicable to associate degree. Repeatable = 1 time (CR)</td>
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<tbody>
<tr>
<td>AH-117A</td>
<td>Basic Phlebotomy Training</td>
<td>36.00 hrs lecture, Units: 2.00. Prerequisite: AH-110. This course meets the California content standards for basic phlebotomy training. It is the first course in the four course series leading to the Phlebotomy Certificate of Accomplishment and eligibility to sit for the state certification exam as a Phlebotomy Technician I. Not applicable to associate degree. Repeatable = 1 time (GR)</td>
</tr>
<tr>
<td>AH-117B</td>
<td>Phlebotomy Skills Lab</td>
<td>27.00 hrs lab, Units: 0.50. Prerequisite: AH-117A; must have been taken within one year. This course is the second course of the four course series required for the Phlebotomy Certificate of Accomplishment. In this course students demonstrate what has been learned in the previous phlebotomy course. In a laboratory setting, under the supervision of the phlebotomist instructor, the student will demonstrate safe blood withdrawal techniques for vacuum system, butterfly needle, syringe system, and capillary puncture. The students will collect samples from each other and demonstrate safe transport of specimens. Skill mastery will be assessed through a final practice exam that must be successfully completed to progress to AH-117D, Phlebotomy Externship. Students must have their Health Forms completed to participate in this course. Not applicable to associate degree. Repeatable = 1 time (GR)</td>
</tr>
<tr>
<td>AH-117C</td>
<td>Advanced Phlebotomy Training</td>
<td>27.00 hrs lecture, Units: 1.50. Prerequisite: AH-117A and AH-117B; both must have been taken within one year. This is the third course in the four course series that meets the California content standards for eligibility to sit for the Phlebotomy Technician I certification exam. All four courses are required to earn the Ohlone College Phlebotomy Certificate of Accomplishment. This course builds upon the content and principles taught in AH-117A, Basic Phlebotomy Training. This course addresses each standard as outlined in the California standards and includes preparation for state certification. Not applicable to associate degree. Repeatable = 1 time (GR)</td>
</tr>
<tr>
<td>AH-117D</td>
<td>Phlebotomy Externship</td>
<td>108.00 hrs lab, Units: 2.00. Prerequisite: AH-117C; must have been taken within one year. This is the fourth of four courses required to earn the Phlebotomy Certificate of Accomplishment. This is a clinical course in which students are assigned to experienced phlebotomists in clinical settings to practice blood collection, patient interaction, specimen processing, and laboratory function in health care. Students are mentored as they master phlebotomy work experience within the past five years as required by California law. Not applicable to associate degree. Repeatable = 1 time (GR)</td>
</tr>
<tr>
<td>AH-118</td>
<td>Advanced Phlebotomy for Practitioners</td>
<td>27.00 hrs lecture, Units: 1.50. Advisory: Phlebotomy work experience within the past five years as required by California law. This course is open to practicing phlebotomists who by law are eligible to sit for the Phlebotomy Technician I certification exam upon successfully completing this course. The content meets the standards as set forth by California law and the Department of Health Services. It prepares students to sit for the certification exam and includes advanced techniques in blood collection. Not applicable to associate degree. Repeatable = 1 time (GR)</td>
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**ASL -101A**  
Principles of American Sign Language I  
18.00 hrs lecture  
Units: 5.00  
Prerequisite: ASL-101A or two years of high school ASL  
Accepted For Credit: CSU & UC  
This course is an enhanced and expanded Level I study of the fundamentals of American Sign Language grammar and is a further study of the Deaf community and Deaf culture. This course is recommended for students who have completed ASL-101A and desire to further study and review before taking ASL-102A. Students are expected to attend outside events at their own expense. (GR)

**ASL -101B**  
Principles of American Sign Language II  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: ASL-101A or two years of high school ASL  
Accepted For Credit: CSU & UC  
This course is an enhanced and expanded Level I study of the fundamentals of American Sign Language grammar and is a further study of the Deaf community and Deaf culture. This course is recommended for students who have completed ASL-101A and desire to further study and review before taking ASL-102A. Students are expected to attend outside events at their own expense. (GR)

**AH -121**  
EKG Interpretation  
18.00 hrs lecture  
Units: 1.00  
This course will also review cardiac anatomy and physiology in relation to various rhythms. Students will practice interpreting EKG rhythms. A brief review of anatomy and physiology is included. Repeatable = 1 time (CR)

**AH -130**  
Acupressure Connection I  
18.00 hrs lecture  
Units: 1.00  
Cross-referenced Course: HLTH-130  
This course presents the fundamental concepts of acupressure. Students give acupressure treatments to self and others to relieve pain and promote relaxation. Additional holistic health practices are addressed including therapeutic touch, relaxation techniques, meditation, exercise, and nutrition. This course is open to anyone who is interested in living a healthier lifestyle and assisting others to do the same. Registered Nurses and Licensed Vocational Nurses will receive sixteen continuing education hours upon successful course completion. (CR)

**AH -151**  
Applied Clinical Pharmacology  
36.00 hrs lecture  
Units: 2.00  
Accepted For Credit: CSU  
This course provides the respiratory therapy and nursing student or practitioner with a working knowledge of drug therapy in current use with acutely ill clients. (GC)

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**AMERICAN SIGN LANGUAGE**  
Division: Deaf Studies

**ASL -101A**  
Principles of American Sign Language I  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Accepted For Credit: CSU & UC  
This course covers the beginning fundamental principles of American Sign Language and introduces basic information about the Deaf community and Deaf culture. This course is required for students majoring in American Sign Language and Deaf Studies and is a prerequisite for students wishing to enter the Interpreter Preparation Program. Students are expected to attend outside events at their own expense. (GR)

**ASL -101B**  
Principles of American Sign Language II  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: ASL-101A or two years of high school ASL  
Accepted For Credit: CSU & UC  
This course is an enhanced and expanded Level I study of the fundamentals of American Sign Language grammar and is a further study of the Deaf community and Deaf culture. This course is recommended for students who have completed ASL-101A and desire to further study and review before taking ASL-102A. Students are expected to attend outside events at their own expense. (GR)

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**Did you know??**

Ohlone was the first smoke-free college in the Bay Area and has set a trend for other colleges.
ASL-103A  Principles of American Sign Language III
9.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Prerequisite: ASL-102A or ASL-102B
Accepted For Credit: CSU & UC
This course covers the fundamental principles of Level III of American Sign Language for students who have completed ASL-102A and is a further study of the Deaf community and Deaf culture. The course is required for students majoring in American Sign Language and Deaf Studies and students wishing to enter the Interpreter Preparation Program. Students are expected to attend outside events at their own expense. (GR)

ASL-103B  Principles of American Sign Language III
9.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Prerequisite: ASL-103A
Accepted For Credit: CSU & UC
This course is an expanded and enhanced Level III study of the fundamental principles of American Sign Language and is a further study of the Deaf community and Deaf culture. This course is recommended for students who have completed ASL-103A and who desire further study and review before taking ASL-104A. Students are expected to attend outside events at their own expense. (GR)

ASL-104A  Principles of American Sign Language IV
9.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Prerequisite: ASL-103A or ASL-103B
Accepted For Credit: CSU & UC
This course covers the fundamental principles of Level IV of American Sign Language and continues information about the Deaf community and Deaf culture. This course is required for students majoring in American Sign Language and Deaf Studies and students wishing to enter the Interpreter Preparation Program. The course is for students who have completed ASL-103A or ASL-103B. Students are expected to attend outside events at their own expense. (GR)

ASL-104B  Principles of American Sign Language IV
9.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Prerequisite: ASL-104A
Accepted For Credit: CSU & UC
This course is an enhanced and expanded Level IV study of the fundamental principles of American Sign Language and is a further study of the Deaf community and Deaf culture. This course is recommended for students who have finished ASL-104A and desire further study and review. Students are expected to attend outside events at their own expense. (GR)

ASL-140  Deaf Education
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
This course has been designed to provide the student with a general orientation to Deaf/deaf education. The course provides an overview of the historical, philosophical, and social aspects of Deaf education. The course analyzes the impact of Deaf education on hearing families. In addition, it provides an orientation to problems, issues, research, legislation, and current trends in the field of education of the Deaf. Repeatable = 1 time (GR)

ASL-142  Deaf Culture
54.00 hrs lecture
Units: 3.00
Prerequisite: Completion of, or concurrent enrollment in, ASL-101A or ASL-101B
Advisory: ENGL-151B
Accepted For Credit: CSU & UC
This course introduces American Deaf Culture with historical and cultural overview of the American Deaf community and its language, American Sign Language, ASL. Fundamental sociological and anthropological theories will be discussed. Students will be given an opportunity to study and understand minority group dynamics, attitudes and behavior characteristics of the oppressed and oppressor people and the liberation movements. Analysis of the relationship ASL to the history of American Deaf community will be conducted. (GR)

ASL-145  Deaf History
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-101A or ASL-101B
Accepted For Credit: CSU & UC
This is an in-depth study of noted Deaf persons, Deaf contributions to education and job markets, Deaf heritage, international Deaf history, history of California School of the Deaf-Fremont, and history of Bay Area Deaf organizations. (GR)

ASL-150  Linguistics of ASL
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-103B and ENGL-151B
Accepted For Credit: CSU & UC
This course is an in-depth study of the language of American Deaf people including grammar, morphology, phonology, semantics, and discourse of ASL. Taught in ASL only. (GR)

ASL-152  Advanced Fingerspelling
18.00 hrs lecture
Units: 1.00
Prerequisite: ASL-102A or ASL-102B
This course provides concentrated instruction in the receptive and expressive practice of advanced fingerspelling at increasing levels of complexity. It is recommended for advanced students majoring in American Sign Language and Deaf Studies or who are in the Interpreter Preparation Program. Repeatable = 3 times (GC)

ASL-154  Advanced American Sign Language Vocabulary
36.00 hrs lecture
Units: 2.00
Prerequisite: ASL-102A or ASL-102B
This course is designed to provide students with receptive and expressive knowledge of over 5,000 signs and commonly used phrases. Regional variations of signs will be studied. Conceptual accuracy is emphasized. Students will be able to correctly sign English into ASL and be able to translate ASL into English. This course is recommended for advanced students majoring in American Sign Language, Deaf Studies Program, and/or Interpreter Preparation. Repeatable = 3 times (GC)
ASL-155        ASL Literature (Folklore)
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-103A or ASL-103B
This course is an introduction to the discussion and analysis of
ASL literature. Two ASL stories will be studied in depth and
analyzed from a variety of perspectives. Taught in ASL only.
(Gr)

ASL-156        Advanced Reception of ASL
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-102A or ASL-102B
This course is designed to strengthen the receptive skills of
students interested in ASL by analyzing stories, jokes, and
experiences of a large variety of Deaf signers. This course is
recommended for advanced students in the American Sign
Language and Deaf Studies program or in the Interpreter
Preparation programs. Repeatable = 3 times (GC)

ASL-157        ASL Storytelling
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-103B
This course includes various levels and situations from simple
to complex ASL stories. Expressive storytelling will incorporate
ASL principles, sign order, facial expressions, body expressions,
and pantomime. Receptive storytelling will involve critiquing
and analyzing given stories. Taught in ASL only. (Gr)

ASL-158        Classifiers in ASL
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-102A or ASL-102B
In this course, students will study the classifier system of ASL.
Taught in ASL only. Repeatable = 1 time (GC)

ASL-160        American Sign Language Field Work
54.00 hrs lab
Units: 1.00
Prerequisite: ASL-102A or ASL-102B
This course offers direct experience signing in formal and/or
informal conversational settings or projects involving
knowledge of ASL and deafness. Repeatable = 3 times (CR)

ASL-161        American Sign Language Field Work
108.00 hrs lab
Units: 2.00
Prerequisite: ASL-101A
This course offers direct experience signing in formal and/or
informal conversational settings or projects involving
knowledge of ASL and deafness. Repeatable = 3 times (CR)

ASL-181A       Conversational ASL I
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
This course is designed to provide basic conversational skills in
the language used by most Deaf people in the United States.
Emphasis will be placed on basic American Sign Language
structure. Students are expected to attend outside events at
their own expense. Repeatable = 1 time (GC)

ASL-181B       Conversational ASL II
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-181A
Accepted For Credit: CSU
This course is a continuation of the study of ASL as used in a
conversational mode. It is designed to provide intermediate
conversational skill in the use of ASL. Students are expected to
attend outside events at their own expense. Repeatable = 1
time (GC)

ASL-183        ASL Skill Building
54.00 hrs lab
Units: 1.00
Prerequisite: ASL-101A
This is a course for students wishing to become more
proficient in using ASL and to further develop their vocabulary,
ASL grammar, and fingerspelling skills. Taught in ASL only.
Repeatable = 3 times (GC)

ASL-190A       Workshop in Beginning ASL I
54.00 hrs lecture
Units: 3.00
This course is a Beginning Level I basic workshop for students
covering selected topics in the area of American Sign Language
(ASL), Deaf Education, and Deaf Culture. The theme and
content of each workshop varies and is determined by
American Sign Language/Deaf Studies instructors and focused
to meet the needs of the workshop participants. Repeatable =
3 times (CR)

ASL-190B       Workshop in Beginning ASL II
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-190A
This course is a Beginning Level II workshop for students
covering selected topics in the area of American Sign Language
(ASL), Deaf Education, and Deaf Culture. The theme and
content of each workshop varies and is determined by
American Sign Language/Deaf Studies instructors. Repeatable =
3 times (CR)

ASL-190C       Workshop in Beginning ASL III
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-190B
This course is an Advanced Beginning Level III workshop for
students covering selected topics in the area of American Sign
Language (ASL), Deaf Education, and Deaf Culture. The theme
and content of each workshop varies and is determined by
American Sign Language/Deaf Studies instructors and focused
to meet the needs of the workshop participants. Repeatable =
to a maximum of 9 units for ASL-190A-C (CR)

ASL-191A       Workshop in Intermediate ASL I
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-190C
This course is an Intermediate Level workshop for students
covering selected topics in the area of American Sign Language
(ASL), Deaf Education, and Deaf Culture. The theme and
content of each workshop varies and is determined by
American Sign Language/Deaf Studies instructors. Repeatable =
3 times (CR)

ASL-191B       Workshop in Intermediate ASL II
54.00 hrs lecture
Units: 3.00
Prerequisite: ASL-191A
This course is a Level II Intermediate workshop for students
covering selected topics in the area of American Sign Language
(ASL), Deaf Education, and Deaf Culture. The theme and
content of each workshop varies and is determined by
American Sign Language/Deaf Studies instructors. Repeatable =
3 times (CR)
**ASL-191C  Workshop in Intermediate ASL III**
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ASL-191B  
This course is a Level III Intermediate workshop for students covering selected topics in the area of ASL and Deaf Studies. The theme and content of each workshop vary and is determined by American Sign Language/Deaf Studies instructors. Repeatable = to a maximum of 9 units for ASL-191A-C (CR)

**ANTHROPOLOGY**  
Division: Science, Technology, and Engineering

**ANTH-101  Physical Anthropology**
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course is a study of human biology with an emphasis on human evolution and the interaction between biology and culture. Major topics of discussion will be genetics, human variation, primate studies, and the prehistorical fossil record. (GC)

**ANTH-102  Cultural Anthropology**
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course deals with the study of human society with reference to the development and change of culture. An emphasis will be placed on the comparative review of language, marriage and family, belief systems, wealth, power, and political organizations. (GC)

**ANTH-103  Introduction to Archaeology and Prehistory**
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course introduces the subject of archaeology through the study of concepts, theories, and methods employed by archaeologists to reconstruct past life ways. Topics include the nature of archaeological research; field methods; data acquisition, analysis, and interpretation; cultural resource management; and an examination of cultural adaptations and change. (GC)

**ANTH-105  Field Archaeology**
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU  
This course deals with the methods of scientific excavation implementing the techniques of a field archeologist. Emphasis will be on the scientific method as it relates to excavation, classifying, cataloging, and preservation of past human cultures under supervised field and laboratory conditions. Repeatable = 3 times (GC)

**ANTH-106  Magic, Witchcraft, and Religion**
54.00 hrs lecture  
Units: 3.00  
Advisory: ANTH-102; eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course involves the study of belief systems of cultures around the world, examining religion and spirituality from an anthropological perspective. Students will analyze the functions of religious beliefs and the varied expressions of religion through ritual behaviors, use of magic, cures, hallucinogenic drugs and the importance of the mind-body connection. (GC)

**ANTH-108  Introduction to Forensic Anthropology**
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: AJ-108  
Advisory: ENGL-151B and ENGL-163  
Accepted For Credit: CSU  
This course introduces the field of forensic anthropology through a study of the history and methods of forensic anthropology and the role it plays in the medico-legal system. Topics include the human skeletal system, forensic anthropology, recovery and techniques for analyzing human skeletal remains. (GC)

**ARABIC**  
Division: Humanities, Social Sciences, and Mathematics

**ARBC-101A  Elementary Arabic**
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Accepted For Credit: CSU & UC  
This course is an introduction to the speaking, reading and writing of Arabic including fundamentals of grammar and Arabic culture. (GR)

**ARBC-101B  Elementary Arabic**
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: ARBC-101A or two years of high school Arabic  
Accepted For Credit: CSU & UC  
This course is a continuation to the speaking, reading and writing of Arabic and includes fundamentals of grammar and Arabic culture. (GR)
ART

Division: Fine Arts, Business, and Communication Studies

ART-100  Survey of the Arts  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: IS-100, MUS-100, TD-100  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
In this course theatre, art, and music are explored through discussion, historical review, and contemporary issues. The purpose of this course is to increase students’ understanding and enjoyment of the arts. Requires attendance at selected events offered by Ohlone College at the Gary Soren Smith Center for the Fine and Performing Arts. (GC)

ART-101  Art: An Introduction  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a survey of the visual arts: painting, sculpture, architecture, and film. The student will be introduced to the various functions of art in our society. The desired outcome is a more critical observer. Requires attendance at selected events offered by Ohlone College at the Gary Soren Smith Center for the Fine and Performing Arts. (GC)

ART-103A  Survey of World Art History – Prehistoric Through 1300 C.E.  
72.00 hrs lecture  
Units: 4.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a survey of the history of sculpture, architecture, and visual arts throughout the world prior to 1300 CE. The civilizations, regions, and cultures studied are Mesopotamia, Egypt, Ancient Greece and Rome, Early Christian, Islam, African, Pre-Columbian, Asia and the art of the Americas. (GC)

ART-103B  Survey of World Art History – 14th Century Through 20th Century  
72.00 hrs lecture  
Units: 4.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a survey of the history of sculpture, architecture, and visual arts throughout the world after 1300 CE. The civilizations, regions, and cultures studied are Europe, Africa, Asia and the Americas. (GC)

ART-104A  2D Design  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU & UC  
This lecture/studio class will introduce the beginning student to the techniques and concepts related to the organization of two-dimensional imagery. Studio work will include pen and ink, collage, painting, drawing, and bookmaking. Repeatable = 3 times (GC)

ART-104B  3D Design  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: ART-104A  
Accepted For Credit: CSU & UC  
This lecture/studio class is a continuation of ART-104A. A major emphasis will be on the principles of three-dimensional form. Repeatable = 3 times (GC)

ART-104C  Color  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU & UC  
This lecture/studio class will introduce the beginning student to various theories of color, hands-on experience in mixing colors, and practical observation in color relationships and effects. The quality of color will be explored through hue, value, and saturation. Repeatable = 3 times (GC)

ART-105A  Glass Art and Design  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
This course is an introduction to fundamentals of art and design using glass as a medium. Studies include line, form, shape, color, and spatial relationships. The course covers glass cutting, lamination, copper foil stained glass, casting and fusing techniques. Repeatable = 3 times (GC)

ART-105B  Advanced Glass Fabrication  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-105A  
Accepted For Credit: CSU  
This course emphasizes further explorations in glass, including moldmaking, casting, fusing, slumping, and sandblasting. Repeatable = 3 times (GC)

ART-105C  3D Glass  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-105A and ART-105B  
Accepted For Credit: CSU  
This course emphasizes three-dimensional glass, using advanced techniques in kiln forming, casting, abrasive blasting, lamination, and coldworking. Repeatable = 3 times (GC)

ART-106A  Descriptive Drawing  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU & UC  
This is a basic drawing course designed to teach fundamental drawing skills and techniques. Direct observation, composition, and methods of expressing subject matter – as well as the use of charcoal, pencil, ink, and pastel – will be emphasized. Repeatable = 3 times (GC)

ART-106B  Intermediate Descriptive Drawing  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-106A  
Accepted For Credit: CSU & UC  
This course involves a continued exploration of drawing concepts focusing on creative expression and composition. The course emphasizes developing a sustainable studio practice using a variety of methods and materials. Repeatable = 3 times (GC)

ART-107A  Life Drawing  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-106A  
Accepted For Credit: CSU & UC  
This course involves drawing the human figure from both an anatomical and intuitively observational method. Media used include charcoal, graphite, ink, water color, and oil wash. Repeatable = 3 times (GC)
ART -107B  Life Drawing  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-107A  
Accepted For Credit: CSU & UC  
This course is a continuation of the work and methodology of ART-107A, but with an emphasis on expressive interpretation in drawing the human figure and the use of color. Repeatable = 3 times (GC)  

ART -108  Perspective Drawing  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: ART-106A  
Accepted For Credit: CSU & UC  
This is a practical course in the techniques and principles of drawing in one and two point freehand and constructed perspective with an emphasis on drawing interiors and furniture. Repeatable = 3 times (GC)  

ART -109A  Beginning Graphic Design I  
(Letter Forms and Typography)  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: GA-109A  
Advisory: ART-104A  
Accepted For Credit: CSU  
This course is an introduction to Graphic Design. It will cover the fundamentals of letter form design with traditional and contemporary alphabets. Studio practice will emphasize the relationships between image and message. Repeatable = 3 times (GC)  

ART -109B  Beginning Graphic Design II  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: GA-109B  
Prerequisite: ART-109A or GA-109A  
Accepted For Credit: CSU  
This course is an introduction to the pictorial image and written word as basic components in a format for communications. The studio practice develops student’s ability to formulate and communicate a concept into graphic form for both presentation and production. Repeatable = 3 times (GC)  

ART -110A  Advanced Graphic Design I  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: GA-110A  
Prerequisite: GA-109B or ART-109B  
Accepted For Credit: CSU  
This is an advanced class. The emphasis is on students’ problem-solving ability. It includes comprehensive projects in applied graphics and three-dimensional design. There is instruction in techniques for package design, product visualization, and execution of 3-D design prototypes for presentation and photography. Repeatable = 3 times (GC)  

ART -110B  Advanced Graphic Design II  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: GA-110B  
Prerequisite: ART-110A or GA-110A  
Accepted For Credit: CSU  
This course gives advanced attention to design solution and presentation. The class deals with the development of a single all-inclusive graphic design project. The emphasis is on effective client relationship from concept development through assignment completion. Repeatable = 3 times (GC)  

ART -111A  Painting – Color and Composition  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: ART-104A or ART-106A  
Accepted For Credit: CSU & UC  
This is an introductory course in studio painting practices designed to involve the student in basic studio techniques and experiences with regard to color, composition, and subject matter. Oil paint will be the primary media. Introduction to other painting media will be included in the instruction. Repeatable = 3 times (GC)  

ART -111B  Painting  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Prerequisite: ART-111A  
Accepted For Credit: CSU & UC  
This class continues the approaches studied in ART-111A with an emphasis on form and content of subject matter. Techniques in painting with a student choice of media will be further explored. Repeatable = 3 times (GC)  

ART -112  Watercolor  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: ART-106A  
Accepted For Credit: CSU & UC  
This course concentrates on water-based media including transparent watercolor, dyes, gouache, and tempera. Brush techniques and investigation of various papers will be included. Repeatable = 3 times (GC)  

ART -116A  Basic Sculpture  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: ART-104A or ART-106A  
Accepted For Credit: CSU & UC  
This is an introductory course designed to familiarize the student with contemporary forms of sculpture. Studio practice with process and material will be emphasized. Repeatable = 3 times (GC)
<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Units</th>
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<td>Advanced Sculpture</td>
<td>3.00</td>
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<td>Prerequisite: ART-116A</td>
<td>Accepted For Credit: CSU &amp; UC</td>
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<td>ART-119A</td>
<td>3D Studio Lab</td>
<td>1.00</td>
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<td>Co-requisite: One of the following: ART-105A,B,C; ART-116A,B,C; ART-120A,B,C; ART-121A,B; ART-122A,B; ART-124; ART-125A,B; ART-126A,B</td>
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<td>ART-120A</td>
<td>Ceramic Studio Development and Maintenance I</td>
<td>1.00</td>
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<tr>
<td>ART-121A</td>
<td>Introductory Ceramics I</td>
<td>3.00</td>
<td>18.00 lecture, 54.00 hrs lab</td>
<td>Prerequisite: ART-121B</td>
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<td>ART-122A</td>
<td>Ceramic Throwing I</td>
<td>3.00</td>
<td>18.00 lecture, 54.00 hrs lab</td>
<td>Prerequisite: ART-121B</td>
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<td>ART-123</td>
<td>Ceramic Decorating</td>
<td>3.00</td>
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<td>Prerequisite: ART-121B</td>
<td>Accepted For Credit: CSU &amp; UC</td>
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</tbody>
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ART-133C Advanced Black and White Photography
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Prerequisite: ART-131B
Accepted For Credit: CSU & UC
The emphasis is on designing and forming completed ceramic works for the market. This course includes large outdoor ceramic shapes such as tiles and murals and non-functional ceramic sculpture. Repeatable = 3 times (GC)

ART-131 History of Photography
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This course is a survey of photography as an historical and contemporary form of art and communication. The student will develop appreciation for, and comprehension of, the issues, practices, and theories involved in visual communication as well as gain insights into the role of photography with regard to social, cultural, and political shifts and events from its inception in the early 19th century to the present day. (GC)

ART-133A Black and White Photography
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Accepted For Credit: CSU & UC
This course covers the fundamental processes of photography including camera mechanics, film exposure, optics, composition and darkroom skills required to produce quality continuous tone black and white prints. Course will include an overview of historic and contemporary photography. A camera with manual controls is required. Repeatable = 3 times (GC)

ART-133B Intermediate Black and White Photography
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Prerequisite: ART-133A
Accepted For Credit: CSU
This is a darkroom course in black and white photography. Students refine their use of light sensitive materials and gain hands-on experience with alternative photographic processes. This course affords the opportunity for students to emphasize creativity and artistic style. Repeatable = 3 times (GC)

ART-133C Advanced Black and White Photography
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Prerequisite: ART-133B
Accepted For Credit: CSU & UC
This is a darkroom course in black and white photography. Students learn about camera exposure as it relates to print controls. The course spends time on previsualization techniques and affords the opportunity for students to emphasize creativity and artistic style. Students work independently on photography projects of their own design. Repeatable = 3 times (GC)

ART-134A Basic Color Photography
36.00 hrs lecture, 126.00 hrs lab
Units: 3.00
Accepted For Credit: CSU & UC
This course examines color and design in photography with emphasis on creative expression through 35mm color. The course introduces color negative and reversal films. Techniques covered in the lab include digital image capture through scanning and computer adjustments to offer color correction, image manipulation, and capability to produce multi-media effects. A 35mm camera is required, as well as the purchase of film and processing. (GC)

ART-138A Beginning Photoshop
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Prerequisite: ART/GA-138A
Cross-referenced Course: GA-138B
Accepted For Credit: CSU & UC
This course is for photographers with limited experience or new to Adobe Photoshop. Students learn how to work with a digital “darkroom” using images supplied by the instructor for this purpose. Topics included are image file management and organization, file formats, resolution, basic image editing, selective image editing, scanning, preparing images for web-based application, how to purchase a digital camera, and more. A digital camera is not required. Repeatable = 3 times (GC)

ART-138B Intermediate Photoshop
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Prerequisite: ART/GA-138A
Cross-referenced Course: GA-169A
Accepted For Credit: CSU
This course explores the photographer’s creative process from several directions. Students will undertake photographic projects designed to provide engagement with a variety of subject matter and ways of photographing, look at photographic work in online and local galleries and museums, consider current issues having to do with photographic technologies, discuss their photographs with other students in an effort to improve their creative processes. Technical instruction will include camera functions, resizing and saving digital files, and minor image modification. For intense technical instruction see ART-138A and ART-138B. Repeatable = 3 times (GC)

ART-139A Beginning Digital Photography
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: ART/GA-138A
Cross-referenced Course: GA-138B
Accepted For Credit: CSU & UC
This course is for photographers wishing to increase their working knowledge of Adobe Photoshop. Students work with a digital “darkroom” using original images as well as images supplied by the instructor. Topics included are working with layers and masks, opacity and blend modes, transforming, working with text, camera raw, actions and smart filters, print and web-based workflow. A digital camera is not required. Repeatable = 3 times (GC)

ART-139B Intermediate Digital Photography
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: ART-139A or GA-169A
Cross-referenced Course: GA-169B
Accepted For Credit: CSU
This course continues an exploration of the photographer’s creative process from several directions. Students will undertake photographic projects designed to provide engagement with a variety of subject matter and ways of photographing; complete an extended photographic project of their choosing and receive guidance from the instructor and students; look at photographic work in online and local galleries and museums; consider current issues around photographic technologies; discuss their photographs with other students in an effort to improve their creative processes. Technical instruction will include camera functions, resizing and saving digital files, and minor image modification. For intense technical instruction see ART-138A and ART-138B. Repeatable = 3 times (GC)
ART-150A Interior Design Concepts
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: ID-150A
Accepted For Credit: CSU
In this introductory course, students analyze interiors using basic design concepts, principles, and techniques used by professional interior designers, and case studies in problem solving with an emphasis on residential interiors are presented.

ART-150B Interior Design
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-150B
Prerequisite: ART-150A or ID-150A
Accepted For Credit: CSU
This course is a continuation of ART-150A. Interior design theories and methodologies are explored in depth through case studies emphasizing the design of public space. Repeatable = 3 times (GC)

ART-146 Photography/Graphic Arts Newspaper Staff
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Cross-referenced Course: JOUR-146
Advisory: ART-106A or ART-133A
Accepted For Credit: CSU
Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to Macintosh computers, scanners, and Photoshop for completion of assignments. Students are also introduced to legal and ethical responsibilities. ART-146 students are expected to produce one photo/graphic per issue. Repeatable = to a maximum of 9 units (GC)

ART-147 Photography/Graphic Arts Newspaper Staff
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Cross-referenced Course: JOUR-147
Advisory: ART-106A or ART-133A
Accepted For Credit: CSU
Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to Macintosh computers, scanners, and Photoshop for completion of assignments. Students are also introduced to legal and ethical responsibilities. ART-147 students are expected to produce two photos or graphics per issue. Repeatable = to a maximum of 9 units (GC)

ART-148 Photography/Graphic Arts Newspaper Staff
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Cross-referenced Course: JOUR-148
Advisory: ART-106A or ART-133A
Accepted For Credit: CSU
Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to digital cameras, Macintosh computers, scanners, and Photoshop for completion of assignments. Students are also introduced to legal and ethical responsibilities. ART-148 students are expected to produce three photos or graphics per issue. This course is usually reserved for managers and editors. Repeatable = to a maximum of 9 units (GC)

ART-151 Visualization and Presentation
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-151
Accepted For Credit: CSU
This course familiarizes students with current methods and materials used in the design industry to develop concepts and communicate ideas. Students will prepare projects for a design portfolio. Repeatable = 3 times (GC)

ART-153 History of Decorative Arts
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: ID-153
Accepted For Credit: CSU & UC
Students study furniture construction, styles, and periods in conjunction with the architecture and related decorative arts of each era from ancient times to the present. This course includes political, religious, and cultural histories which significantly influenced these arts. (GC)

ART-154 Contemporary Home Design
36.00 hrs lecture
Units: 2.00
Cross-referenced Course: ID-154
Accepted For Credit: CSU
Students study the architectural history of home design and learn practical applications of information relating to design, construction methods, and economic practices. (GC)

ART-155A Architectural Drafting for Interior Design
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-155A
Advisory: Concurrent with ART/ID/GA-163
Accepted For Credit: CSU
This course will introduce basic drafting techniques as related to architectural working drawings for interior design. Construction materials and procedures will be discussed. Repeatable = 3 times (GC)

ART-155B CAD for Interior Design
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-155B
Advisory: ART/ID-155A
Accepted For Credit: CSU
This course focuses on the fundamentals of computer-aided drafting as related to interior design and architectural drawings. Understanding CAD concepts and using commands are emphasized. Drawing skills are learned and developed by applying these concepts to solve practical laboratory problems. Repeatable = 3 times (GC)

ART-156 Architectural Modelmaking for Interior Design
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-156
Accepted For Credit: CSU
Scale models will be developed in this class for presenting and studying architectural interior spaces. A wide range of materials and processes will be explored. Repeatable = 3 times (GC)

ART-157 Professional Practice for Interior Design
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: ID-157
This class introduces basic business practices for interior designers. It also includes an overview of career paths, business planning and organization, professional associations, marketing, sales, wholesale resource development, contractual obligations, and ethics. It is designed for people preparing to enter the field of interior design. (GC)
ART-158  Textiles
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ID-158
Accepted For Credit: CSU & UC
This is a comprehensive course in the study of textiles as related to interior design. Fiber and fabric construction and characteristics are examined; textile choices are evaluated and analyzed for safety, functionality, and aesthetics; and the impacts of textiles on interior environments are considered. Students gain an empirical understanding of the nature of textiles though hands-on projects in the laboratory component. Repeatable = 3 times (GC)

ART-159A  Applied Design: Residential Lighting
18.00 hrs lecture
Units: 1.00
Cross-referenced Course: ID-159A
Accepted For Credit: CSU
This seminar will present an overview of basic considerations necessary to plan, choose, and place lighting fixtures throughout a home to help define space, articulate atmosphere, direct attention, and facilitate activities. (GC)

ART-159B  Applied Design: Color for the Home
18.00 hrs lecture
Units: 1.00
Cross-referenced Course: ID-159B
Accepted For Credit: CSU
This seminar will explore various approaches that may be followed to arrive at color schemes that are satisfying, comfortable, and exciting. (GC)

ART-160A  Computer Graphics I
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: BA-160A, GA-160A, CS-160A
Accepted For Credit: CSU & UC
This course is an introduction to microcomputers and to the creation of computer-generated graphics. This course examines the variety of software/hardware tools and techniques available for the production of computer-made imagery. The emphasis is on hard-copy production using printers, plotters, and other reproduction methods. This course also covers design principles, business graphics, and elementary programming principles. Repeatable = 3 times (GC)

ART-160B  Computer Graphics II
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: BA-160B, GA-160B, CS-160B
Prerequisite: GA-160A, ART-160A, BA-160A, or CS-160A
Accepted For Credit: CSU
This course is a continuation of ART-160A. The emphasis in this course is on developing intermediate and advanced skills needed to set up and operate a computer graphics work station and publish on the Web. Students complete projects of their choice using complex graphics software, scanners, tablets, and printers. The course emphasis is on the continued development of a portfolio of computer images. Repeatable = 3 times (GC)

ART-161A  Digital Graphics I
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Cross-referenced Course: GA-161A, CAOT-161A
Accepted For Credit: CSU
This course is an overview of computer graphics on desktop computers for graphic designers, artists, typographers, and for business applications. This course will cover hardware and software including laser printers, ink jet printers, scanners, tablets, and bit-mapped and vector-based graphics programs. This course also covers design principles and business graphics. The course emphasis is on the creation of a portfolio of computer graphics drawings. Repeatable = 3 times (GC)

ART-161B  Digital Graphics II
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Cross-referenced Course: GA-161B, CAOT-161B
Prerequisite: GA-161A, ART-161A, or CAOT-161A
Accepted For Credit: CSU
This course is a continuation of ART-161A. The emphasis in this course is on developing intermediate and advanced skills needed to set up and operate a digital graphics work station and publish on the Web. Students complete projects of their choice using complex graphics software, scanners, tablets, and printers. The course emphasis is on the continued development of a portfolio of computer images. Repeatable = 3 times (GC)

ART-163  Digital Arts Lab – Macintosh
27.00 hrs lab
Units: 0.50
Cross-referenced Course: GA-163, ID-163
This course is a lab component for all courses taught on the Macintosh and on drafting equipment in these areas: Art, Graphic Arts/Computer Graphics, Photography, and Interior Design. Students will produce digital graphic and drafting projects for art related classes. Repeatable = 3 times (CR)

ASTRONOMY
Division: Science, Technology, and Engineering

ASTR-101A  General Astronomy of the Solar System
54.00 hrs lecture
Units: 3.00
Advisory: MATH-151 and ASTR-102
Accepted For Credit: CSU & UC
This course provides the student with an introduction to the history, principles, methods, and fundamentals of astronomy. (GR)

ASTR-101B  General Astronomy Beyond the Solar System
54.00 hrs lecture
Units: 3.00
Advisory: ASTR-102
Accepted For Credit: CSU & UC
This course is an introduction to the fundamental principles and the dynamics of the astronomy beyond the Solar System. (GR)
ATHL-100  Intercollegiate Experience
10.80 hrs lab
Units: 0.00
Corequisite: ATHL-380
Advisory: Medical clearance within the last year
This course allows potential athletes to experience what it takes to be a part of an intercollegiate team. Not applicable to associate degree. Repeatable = 2 times (NG)

ATHL-101A2  Functional Sports Performance
36.00 hrs lab
Units: 0.50
Advisory: Medical check within the last year
Accepted For Credit: CSU & UC
This course is for incoming student athletes to perform and develop their skills as they relate to their specific sport. This course will also be an opportunity for specific coaches to evaluate individual players and to better identify deficiencies prior to the start of the season. Repeatable = 2 times (GC)

ATHL-101A3  Functional Sports Performance
54.00 hrs lab
Units: 1.00
Advisory: Medical check within the last year
Accepted For Credit: CSU & UC
This course is for incoming student athletes to perform and develop their skills as they relate to their specific sport. This course will also be an opportunity for specific coaches to evaluate individual players and to better identify deficiencies prior to the start of the season. Repeatable = 2 times (GC)

ATHL-110A2  Sport Specific Training
36.00 hrs lab
Units: 0.50
Advisory: Medical check within the last year
Accepted For Credit: CSU & UC
This course is designed to improve neuromuscular conditioning and agility related to sport-specific movements. Course is designed for intercollegiate-level athletes. Repeatable = 2 times (GR)

ATHL-110A3  Sport Specific Training
54.00 hrs lab
Units: 1.00
Advisory: Medical check within the last year
Accepted For Credit: CSU & UC
This course is designed to improve neuromuscular coordination and agility related to sport-specific movements. Course is designed for intercollegiate-level athletes. Repeatable = 2 times (GR)

ATHL-111A2  Advanced Strength Training
36.00 hrs lab
Units: 0.50
Advisory: Medical clearance within the last year
Accepted For Credit: CSU & UC
This activity course is designed to assist the student athlete with advanced strength training techniques for personal muscular development. Repeatable = 2 times (GC)

ATHL-112A2  Progressive Weight Training
36.00 hrs lab
Units: 0.50
Advisory: Medical clearance within the last year
Accepted For Credit: CSU & UC
Set in the Fitness Lab, this course includes the use of free weights, machine weights, and lifting platforms to develop and improve muscular strength and endurance. Repeatable = 2 times (GC)

ATHL-112A3  Progressive Weight Training
54.00 hrs lab
Units: 1.00
Advisory: Medical clearance within the last year
Accepted For Credit: CSU & UC
Set in the Fitness Lab, this course includes the use of free weights, machine weights, and lifting platforms to develop and improve muscular strength and endurance. Repeatable = 2 times (GC)

ATHL-220  Women's Volleyball
180.00 hrs lab
Units: 3.00
Prerequisite: Medical check within the last year.
Corequisite: ATHL-380
Accepted For Credit: CSU & UC
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)
**ATHL-222**  
**Women’s Soccer**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-223**  
**Men’s Soccer**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-224**  
**Women’s Waterpolo**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-225**  
**Men’s Waterpolo**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-226**  
**Women’s Basketball**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-227**  
**Men’s Basketball**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-228**  
**Women’s Swimming**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-229**  
**Men’s Swimming**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-230**  
**Women’s Softball**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-231**  
**Men’s Baseball**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-232**  
**Women’s Tennis**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-233**  
**Men’s Tennis**  
180.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is designed for students who desire to compete in intercollegiate athletics and who can perform the necessary physical skills. Repeatable = 3 times (GC)

**ATHL-262**  
**Coaching Volleyball**  
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is a study of fundamental offensive and defensive techniques and strategies as they apply to teaching and/or coaching volleyball. This course includes the principles of how to scout games, critique athletic skills, and plan a practice schedule. Repeatable = 2 times (GC)

**ATHL-264**  
**Coaching Soccer**  
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Prerequisite: Medical clearance within the last year  
Corequisite: ATHL-380  
Accepted For Credit: CSU & UC  
This course is a study of fundamental offensive and defensive techniques and strategies as they apply to teaching and/or coaching soccer. This course includes the principles of how to scout games, critique athletic skills, and plan a practice schedule. Repeatable = 2 times (GC)
ATHL-265 Coaching Basketball
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: Medical clearance within the last year
Corequisite: ATHL-380
Accepted For Credit: CSU & UC
This course is designed for students who wish to learn fundamental offensive and defensive techniques and strategies in basketball as they apply to teaching and/or coaching. The course will also include the principles of scouting, critiquing athletic skills, and planning a practice schedule. Repeatable = 2 times (GC)

ATHL-266 Coaching Softball
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: Medical clearance within the last year
Corequisite: ATHL-380
Accepted For Credit: CSU & UC
This course is a study of fundamental offensive and defensive techniques and strategies as they apply to teaching and/or coaching softball. This course includes the principles of how to scout games, critique athletic skills, and plan a practice schedule. Repeatable = 2 times (GC)

ATHL-267 Coaching Baseball
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: Medical clearance within the last year
Corequisite: ATHL-380
Accepted For Credit: CSU & UC
This course is a study of fundamental offensive and defensive techniques and strategies as they apply to teaching and/or coaching baseball. This course includes the principles of how to scout games, critique athletic skills, and plan a practice schedule. Repeatable = 2 times (GC)

ATHL-268 Coaching Tennis
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: Medical clearance within the last year
Corequisite: ATHL-380
Accepted For Credit: CSU & UC
This course is a study of fundamental offensive and defensive techniques and strategies as they apply to teaching and/or coaching tennis. This course includes the principles of how to scout games, critique athletic skills, and planning a practice schedule. Repeatable = 2 times (GC)

ATHL-380 Intercollegiate Athletic Injury Rehabilitation
18.00 hrs lab
Units: 0.00
Corequisite: Must be an active member of an intercollegiate athletic team as evidenced by enrollment in ATHL-220–ATHL-233 or ATHL-262–ATHL-268
This course will provide individualized rehabilitation programs for intercollegiate athletic injuries. Exercises to increase joint range of motion, muscle strength, muscle endurance, agility, and speed will be utilized to assist Ohlone athletes in rehabilitation of their athletic injuries. Not applicable to associate degree. Repeatable = 3 times (NG)

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BIOLOGY
Division: Science, Technology, and Engineering

BIOL-101A Principles of Biology – Molecular and Cellular
54.00 hrs lecture, 108.00 hrs lab
Units: 5.00
Prerequisite: CHEM-101A
Advisory: Eligible for ENGL-151B and ENGL-163; BIOL-130
Accepted For Credit: CSU & UC
This course is the first of a two-semester course that provides an introduction to biological principles for biology and health professions majors. Topics emphasized biochemistry, cell structure and function, metabolism, cellular reproduction, Mendelian genetics, molecular genetics, genetics of prokaryotes and viruses, biotechnological techniques, and evolution. Students taking this course should plan to also take Biology 101B. (GR)

BIOL-101B Principles of Biology – Organisms and Systems
54.00 hrs lecture, 108.00 hrs lab
Units: 5.00
Prerequisite: BIOL-101A
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
This course is an introduction to biological principles for biology and health professions majors. Topics emphasized include evolution, systematics, prokaryote and eukaryote diversity (including a survey of the Kingdoms Protista, Fungi, Animalia, and Plantae), anatomy and physiology of animals, plant structure and function, and ecology. This course completes the lower-division core curriculum in biology for biology and pre-health professions majors. (GR)

BIOL-103A Human Anatomy and Physiology
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Prerequisite: Completion within past three years of BIOL-130 and CHEM-109
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course will cover the cell biology, anatomy, histology, and physiology of the following body systems: integumentary, skeletal, muscles, nervous, endocrine, and reproductive systems. Key concepts covered will include homeostasis, structure/function relationships, the physiology of excitable membranes, and interactions of body systems. (GR)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture</th>
<th>Lab</th>
<th>Prerequisite/Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL-103B</td>
<td>Human Anatomy and Physiology</td>
<td>4.00</td>
<td>54.00</td>
<td>54.00</td>
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<tr>
<td>BIOL-104</td>
<td>Basic Human Anatomy and Physiology</td>
<td>4.00</td>
<td>54.00</td>
<td>54.00</td>
<td>Prerequisite: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-105</td>
<td>Heredity, Evolution, and Society</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: BIOT-114. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-106</td>
<td>Microbiology</td>
<td>5.00</td>
<td>108.00</td>
<td>108.00</td>
<td>Cross-referenced Course: BIOL-106, BIOL-130. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-107</td>
<td>Microbiology and Infectious Diseases</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-108</td>
<td>Human Ecology</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: ENV-108. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-109</td>
<td>Biology of Sexual Reproduction</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: ENV-108. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-114</td>
<td>Introduction to Plant Biology</td>
<td>3.00</td>
<td>45.00</td>
<td>27.00</td>
<td>Cross-referenced Course: BIOL-104. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-130</td>
<td>Introduction to Biology</td>
<td>4.00</td>
<td>54.00</td>
<td>54.00</td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-131D</td>
<td>Review of Biological Concepts</td>
<td>1.00</td>
<td>18.00</td>
<td></td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-140</td>
<td>Sierra Nevada Natural History</td>
<td>3.00</td>
<td>36.00</td>
<td>54.00</td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-141</td>
<td>Marine Biology</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
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<tr>
<td>BIOL-142</td>
<td>Environmental Biology</td>
<td>4.00</td>
<td>54.00</td>
<td></td>
<td>Cross-referenced Course: BIOL-103A. Advised: ENGL-151B, ENGL-163</td>
</tr>
</tbody>
</table>

This course presents anatomy, physiology, and behavioral aspects of the human body. Laboratories include animal and cadaver dissection, histology and physiological recordings. (GR)

This course surveys the structure and function of the major organ systems of the human body. Emphasis is on homeostasis and regulatory mechanisms. Cadaver demonstrations will be presented. (GR)

This course is an introduction to the principles of genetics and evolution for non-science majors. The mechanisms of heredity and evolution will be studied with an emphasis on the human aspect of both subjects. (GC)

This course presents basic microbiology with an emphasis on the medical significance of microorganisms, methods to study and control microbes, and the principles of aseptic technique. (GR)

This course is directed toward understanding the biology of microorganisms, their relationship to disease, their control, and the human defense system. (GR)

This course is an introduction to biology which identifies problems created by man’s modification of his environment, presents solutions to these problems, and offers appropriate alternatives. (GC)

This course introduces study techniques and an introduction to California agriculture. (GR)

This course covers basic concepts of marine ecosystems including oceanographic principles, ecology, and a survey of marine habitats and diversity of marine organisms. Will include two field trips to pacific tidal zones and to San Francisco Bay ecosystems. (GR)

This course provides a basic introduction to plant biology and careers related to plant biology. Topics include basic plant structure, plant growth and development, genetics, plant molecular biology, plant genetic engineering, plant culture techniques and an introduction to California agriculture. (GR)

This course is an introduction to the biological principles for non-science majors. Fundamental biological principles are covered including cell structure and function, ecology, evolution, genetics, taxonomy, and reproduction. (GC)

This course is designed to review course content in selected Biology course(s). This course introduces study techniques and more in-depth discussions of basic biological principles in the selected courses. Repeatable = 3 times (CR)

This course is an introduction to the plants, animals, and geology of the Sierra Nevada. A three-day camping and learning experience in the Sierra Nevada will take place at the end of the semester. Emphasis is on learning the common plants and animals of the region. Recommended for anyone interested in natural history or ecology of the Sierra Nevada. (GC)

This lecture and lab course is an introduction to the biological sciences focusing on diversity; organismal interactions with their environment and with other organisms (ecology), the effects humans have had on biological diversity and ecosystems, and efforts to protect species and their habitats (conservation). (GC)
BIOT-100 Biotechnology and Society  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
Introduction to the scientific principles and techniques of molecular biology and biotechnology, including recombinant DNA technology and gene cloning, recombinant protein design, and analysis of biomolecules. Discussion of technical, ethical, and safety concerns presented by medical, agricultural, pharmaceutical, and forensic applications of biotechnology. (GR)

BIOT-101 Environmental Biotechnology Research Projects  
40.50 hrs lecture, 58.50 hrs lab  
Units: 3.00  
Prerequisite: BIOT-105  
This course introduces students to scientific research in the field of biotechnology. It includes literature reviews, research proposal preparation, experimental design, hands-on experimentation, data interpretation and analysis, and presentation of written and oral reports. Students will maintain a professional laboratory notebook, and practice the behavior and skills required in a modern biotechnology lab. Repeatable = 3 times (GR)

BIOT-102 Chemical Safety and Hygiene  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Cross-referenced Course: CHMT-102  
This course is about chemical and lab safety in the workplace with emphasis on hazardous materials and chemical safety; MSDS sheets; government regulations such as OSHA, FDA, FTC, and EPA; appropriate chemical disposal and recycling methodologies; inventory and storage; classification of chemicals according to safety and health hazards; ANSI standards; workers compensation; and quality assurance. In addition, a brief overview of development of Good Laboratory Practice (GLP) and Good Manufacturing Practice (GMP) will be taught. Students will also undergo basic first aid training, fire extinguisher training, and basic CPR training. (GR)

BIOT-104A HPLC  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Cross-referenced Course: CHMT-104A  
This course trains students in High Pressure Liquid Chromatography, a technique used to separate and analyze chemical mixtures. The course is designed for beginners and intermediate level users in HPLC who want practical laboratory experience. The lectures, supplemental by problem sets, slides, and video presentations, provide the fundamentals needed to understand the techniques and instrumentation involved in this powerful analytical tool. Key topics include basic HPLC instrumentation, detectors, including UV/vis, photo diode array, column selection, qualitative and quantitative analysis and troubleshooting HPLC systems. (GR)

BIOT-104B Gas Chromatography  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Cross-referenced Course: CHMT-104B  
This course is designed for beginners and intermediate level practitioners who want practical laboratory experience in gas chromatography. This course provides the fundamentals needed to understand the technique and instrumentation involved in this powerful analytical tool and covers basic gas chromatography theory, different columns, phases, qualitative identification, data capture, quantitation, integration, practical applications, and troubleshooting. At the end of the class the student will have mastered the fundamentals of GC, participated in extensive hands-on laboratory sessions, and learned specialized techniques based on the student’s specific interests. (GR)

BIOT-104C IR and UV/Vis Spectroscopy  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Cross-referenced Course: CHMT-104C  
A hands-on, lab-based course designed to introduce infrared spectroscopy, this course outlines the various sample handling methods and the numerous transmission and reflectance methods available for infrared analysis. Lab-based lectures will focus on Fourier Transform Infrared (FT-IR) spectroscopy and its advantages, instrument set-up and parameters, and FT-IR sample analysis methods. The course provides hands-on training for obtaining representative infrared spectra of analytical samples. Data manipulation, spectral analysis, and functional group identification will also be taught. The course will also focus on UV-Vis spectroscopy as a complementary method to IR analysis. The UV-Vis spectroscopy will focus on general principles such as wavelength, absorption, transmittance, standard curves, Beer's-Lambert's Law, solvent effects, hypsochromic and bathochromic shifts, chromophores, conjugation, and UV spectral analysis. This course is designed for all levels of UV-Vis/IR instrument users. (GR)

BIOT-104D Nuclear Magnetic Resonance Spectroscopy  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Cross-referenced Course: CHMT-104D  
Prerequisite: CHEM-106B or CHEM-109  
An introductory lab-based course geared towards understanding the application of NMR spectroscopy for structural elucidation of compounds in the fields of organic chemistry, physical chemistry, and biochemistry. Topics include basic principles and theory of NMR and the application of chemical shifts, coupling constants, peak splitting, and peak integration to reveal the molecular structure. Labs will include important one-dimensional experiments and their application in assignments and structure determination problems. In addition, the students will get hands-on experience in acquiring NMR spectra using fundamental concepts of instrumentation such as shimming, sample probes, integration, peak and signal parameters, and basic troubleshooting. (GR)
BIOT-105  Introduction to Cell and Molecular Biology  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: MATH-151 and ENGL-151B  
Accepted For Credit: CSU & UC  
This course introduces basic laboratory research methods (e.g., measuring volume and mass, preparing solutions, using micropipettes, operating a spectrophotometer), and introductory concepts of biology (e.g., chemistry of life, cell structure and function, and classic and modern genetics) to students who are interested in biotechnology, yet have no science background. Also included are strategies to improve success in the classroom such as notetaking, studying, test taking, and other techniques. Students are introduced to the scientific method; they use computers to prepare written reports; they maintain a professional quality laboratory notebook; and they will become familiar with the appropriate behavior and basic skills required in a modern, biological laboratory. Repeatable = 2 times (GR)  

BIOT-106A  Introduction to Bio-Manufacturing Instruments and Measurements  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: ENGL-151B, MATH-151  
This course introduces students to basic laboratory research methods and concepts in biotechnology. Lab skills include the measurement of volumes and masses, as well as the proper use of micropipettes, pH meters, spectrophotometers, microscopes, and autoclaves. In addition, students master aseptic culturing of microbial colonies, protein concentration assay techniques, and bacterial transformation. (GR)  

BIOT-106B  Current Lab Methods in Bio-Pharmaceutical Industry and Standard Operating Procedures  
54.00 hrs lecture, 108.00 hrs lab  
Units: 5.00  
Prerequisite: BIOT-106A  
Corequisite: BIOT-131D, BIOT-106M  
This course trains students for entry-level manufacturing positions in Biotechnology. This course builds upon lab skills learned in BIOT-106A, providing theoretical background and advanced applications. Lab skills include protein purification techniques, dialysis, chromatography, electrophoresis, western blot analysis, serum fractionation, IgG purification, protein A column, ELISA, DNA analysis, and PCR. (GR)  

BIOT-106M  Math Applications in Biotechnology  
36.00 hrs lecture  
Units: 2.00  
Corequisite: BIOT-106B, BIOT-131D  
This course gives the student a sound foundation in mathematical operations, the metric system, calculations involving solution concentrations and dilutions, solving proportions, and other calculations encountered in biotechnology. Students also learn data management, including graphing, basic statistics, and Excel. (GR)  

BIOT-110A  Biotechnology Lab I  
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Prerequisite: BIOT-105, CHEM-109 with grades of B or better  
Accepted For Credit: CSU  
This course introduces students to basic laboratory research methods and concepts in biotechnology. Lab skills developed include the use of basic measuring devices, preparing solutions and dilutions, aseptic culturing of microbes, separation technologies of electrophoresis (agarose polyacrylamide), chromatography (gel filtration, ion exchange, affinity, hydrophobic interactive, FPLC), extraction of DNA, DNA restriction digestion, PCR, DNA sequencing, STR genotyping for human identification, and 2-D gel electrophoresis. (GR)  

BIOT-110A1  Introduction to DNA Techniques  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Prerequisite: BIOT-105 or BIOT-101A  
Accepted For Credit: CSU  
Introduction to DNA Techniques is a continuation of laboratory skills in molecular biology introduced in BIOT-105. The course content focuses on classical recombinant DNA techniques such as DNA extraction, restriction analysis, transformation, spectroscopy, and electrophoresis. Completion of this course will prepare students to enroll in BIOT-110A2 and BIOT-110A3. (GR)  

BIOT-110A2  PCR I and DNA Sequencing  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Prerequisite: BIOT-110A1  
Accepted For Credit: CSU  
PCR I and DNA Sequencing is a continuation of laboratory skills in molecular biology mastered in BIOT-110A1. The course content focuses on PCR cloning and DNA sequencing using the Sanger sequencing chemistry on an Applied Biosystems 310 Genetic Analyzer. (GC)  

BIOT-110A3  Protein Isolation and Assays  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Prerequisite: BIOT-110A1  
Accepted For Credit: CSU  
Protein Isolation and Assays continues the training in molecular biology laboratory techniques begun in BIOT-110A1 and BIOT-110A2. This course emphasizes the isolation and purification of proteins. Techniques include electrophoresis, chromatography (including HPLC & FPLC), and Western Blotting. (GC)  

BIOT-111A  Genomic and cDNA Library Construction and Analysis  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Prerequisite: BIOT-101A or BIOT-110A1  
Accepted For Credit: CSU  
This course uses lecture and lab approaches to teach students the theory and practice of lab techniques used to construct, search, and analyze simple genomic and cDNA libraries. Students will learn replica plating, southern and northern blotting, ELISA, and the use of non-radioactive oligonucleotide probes for searching libraries. (GR)  

\[ "Going to college is important for me because no one in my family has ever been to college and I want to be the first to graduate and set a great example for my younger sisters." \]  
Ariana Figueroa  
Newark Optimist Club Joe Burnett  
Helping Hand Scholarship Recipient  
Future goals: Become a nurse
BIOT-112  Introduction to Bioinformatics
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: ENGL-101A and MATH-151
Accepted For Credit: CSU
This course is an introduction to computational biology and focuses on the computer analysis of biological sequences and structures. The course includes molecular biology databases, database searching, statistical techniques, genome annotation methods, phylogenetic analysis, protein structure prediction and microarray technology. Repeatable = 2 times (GR)

BIOT-113  GMP/GLP
18.00 hrs lecture
Units: 1.00
Accepted For Credit: CSU
This course gives an introduction to the concept of GMP (Good Manufacturing Practice) and GLP (Good Laboratory Practice), and their applications in the biotechnological manufacturing of therapeutic products. The course will discuss what is GMP and GLP, the history of GMP/GLP, federal and international regulation for GMP/GLP and how GMP/GLP are being applied in a bio-manufacturing facility. A field trip to a GMP manufacturing plant in the Bay Area is included. (GR)

BIOT-114  Introduction to Plant Biology
45.00 hrs lecture, 27.00 hrs lab
Units: 3.00
Cross-referenced Course: BIOL-114
Accepted For Credit: CSU & UC
This course provides a basic introduction to plant Biology and careers related to plant biology. Topics include basic plant structure, plant growth and development, genetics, plant molecular biology, plant genetic engineering, plant culture techniques and an introduction to California agriculture. (GR)

BIOT-115A  Mammalian Cell Culture Techniques
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Prerequisite: BIOT-105 and BIOL-101A
Accepted For Credit: CSU
Through a series of lectures and hands-on laboratory procedures, this course introduces mammalian cell culture methods, including sterile technique, media preparation, and the establishment of primary and secondary cell lines. This course also provides students with the skills and concepts needed to work in today’s biotechnology industry. Successful students will qualify to work as technicians in cell culture, manufacturing, and quality control. Repeatable = 1 time (GR)

BIOT-115B  Bioreactor Cell Culture Techniques
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Prerequisite: BIOT-115A
Accepted For Credit: CSU
This course introduces animal cell culture methods, including use of a bioreactor. Through a series of lectures and hands-on exercises, students will learn the techniques and concepts needed to work in cell culture and biomanufacturing. Repeatable = 1 time (GR)

BIOT-116  Biotech Summer Institute
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
This course provides hands-on experience in molecular biology concepts and techniques. Students perform a variety of molecular techniques including PCR-based DNA cloning, restriction analysis, host cell transformation, DNA sequencing, forensic DNA fingerprinting, and protein extraction and purification. (GR)

BIOT-117  Immunology
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Prerequisite: BIOT-105 or BIOL-101A
Accepted For Credit: CSU
This course covers the basics of immunology and the immunological technology relevant to biotechnology. Topics covered include cell culture and protein chemistry relating to immunology, the lymphatic system, cellular immunity, cell typing, humoral immunity and immunoglobulins, making antibodies, ELISA and EIA, affinity chromatography, clinical immunology and autoimmune diseases. (GR)

BIOT-119  Clean Room Operations
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Prerequisite: BIOT-105 or BIOL-101A
Accepted For Credit: CSU
This course provides background and training for clean room operations in biotechnology. This course discusses clean room classifications, regulations, and procedures. Laboratory exercises simulate working conditions in clean room operations. (GR)

BIOT-120A  Introduction to SEM Technology
9.00 hrs lecture
Units: 0.50
Advisory: BIOL-130
Accepted For Credit: CSU
Students will learn theory and applications of Scanning Electron Microscopy in biological and non-biological disciplines including historical development of electron microscopes and current high technology applications of Scanning Electron Microscopes. (GR)

BIOT-120B  SEM – Biological Applications and Techniques
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Prerequisite: BIOT-120A
Accepted For Credit: CSU
Students will learn theory, operation, and applications of Scanning Electron Microscopy in biological sciences including techniques for biological specimen preparation. Repeatable = 2 times (GR)

BIOT-120C  SEM – Physical Science
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Prerequisite: BIOT-120A
Accepted For Credit: CSU
Students will learn theory, operation, and applications of Scanning Electron Microscopy in physical sciences. The course will demonstrate the use of microscopic imaging and compositional detectors for problem solving in material sciences, forensics and environmental sciences. Repeatable = 2 times (GR)
BIOT-121 Biotechnology Careers  
18.00 hrs lecture  
Units: 1.00  
Advisory: Eligible for ENGL-101A and MATH-151  
Accepted For Credit: CSU  
This course is designed to offer an in-depth view of the emerging careers in Biotechnology including agricultural, environmental, forensics, industrial, pharmaceutical, and medical biotechnology careers. Students will have an opportunity to meet many professionals in various biotechnology positions and to discuss the range of career options available and educational training required for each career. Repeatable = 1 time (GR)

BIOT-122 Introduction to Nanotechnology  
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
Nanotechnology explores exciting potential applications of science pertaining to tiny structures. Students will be introduced to fundamentals of biology, chemistry, and engineering. (GC)

BIOT-123 Writing SOPs  
9.00 hrs lecture  
Units: 0.50  
Prerequisite: BIOT-105 or BIOL-101A  
Advisory: ENGL-101A  
Accepted For Credit: CSU  
This is a short training course on the writing of Standard Operating Procedures (SOPs) for biotechnology. The course investigates the rational for writing SOPs, and discusses the standards and regulations that need to be taken into account in planning SOPs. The course also covers the procedures, formats, and writing styles employed in writing, implementing, and evaluating SOPs. (GR)

BIOT-131 Computing Concepts in Biotechnology  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: CS-131  
Accepted For Credit: CSU  
This course introduces the basic computing concepts, the most commonly used computer algorithms, and programming languages in biotechnology. (GC)

BIOT-133 Introduction to SAS Programming  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: CS-133  
Accepted For Credit: CSU  
The SAS system has become the international standard for data management, manipulation, storage, retrieval, and statistical analysis. This course offers an introduction to the SAS software by using core elements of the SAS system programming language and procedures. (GR)

BIOT-133A Data Analysis Using SAS  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: CS-133A  
Prerequisite: BIOT-133 or CS-133  
Accepted For Credit: CSU  
This course focuses on the following key areas: statistical inference, analysis of variance, multiple regression, categorical data analysis, and logistic regression. (GC)

BIOT-141B SAS Graphing and ODS  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Cross-referenced Course: CS-141B  
Advisory: BIOT-133 or CS-133  
Accepted For Credit: CSU  
This course introduces SAS/GRAPH and ODS. Learn how to design, construct, and display customized graphs quickly and efficiently. Learn how to create a data set from the results of most SAS procedures and build custom reports. Repeatable = 1 time (GC)

BIOT-143 Advanced SAS Programming  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: CS-143  
Advisory: BIOT-133/CS-133 or some experience in SAS programming  
Accepted For Credit: CSU  
This course provides students with a basic understanding of macro programming and SQL procedure in SAS software. SQL and macro programming can provide more flexibility and power in data management and data analysis. (GR)
BROADCASTING
Division: Fine Arts, Business, and Communication Studies

BRDC-110 Digital Video for Web and DVD
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: MM-110
Advisory: MM-102A
Accepted For Credit: CSU

This course focuses on laboratory practice utilizing knowledge and techniques gained in the radio programming and production courses. KOHL Radio serves as the operational lab. Repeatable = 3 times (GR)

BRDC-120 Introduction to Electronic Media
36.00 hrs lecture
Units: 2.00
Accepted For Credit: CSU

This course introduces the history, structure, function, economics, content, and evolution of radio, television, film, and the Internet, including traditional formats and emerging electronic media delivery systems. The social, political, regulatory, ethical, and occupational impact of the electronic media are studied. (GR)

BRDC-123A Radio Operations I
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Accepted For Credit: CSU

This course is an introduction to the technical operation of a radio broadcast facility. Applied concepts include preparing and producing material for broadcast, gathering and delivering local news on the air, operation of KOHL Radio by FCC standards, and creating an effective audition tape. Repeatable = 1 time (GR)

BRDC-123B Radio Operations II
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: BRDC-123A
Accepted For Credit: CSU

This course allows students to refine basic skills introduced in BRDC-123A. Advanced digital and analog production techniques are introduced. Additional areas of concentration include management and operations software systems, aircheck analysis, market overviews, and creating an effective employment package. Repeatable = 1 time (GR)

BRDC-124 Broadcast Internships
180.00 hrs lab
Units: 3.00
Prerequisite: BRDC-123A
Accepted For Credit: CSU

This course is for students who will intern at Bay Area broadcast stations, learning various aspects of the broadcasting business. Repeatable = 3 times (GR)

BRDC-127A Radio Broadcast Lab
54.00 hrs lab
Units: 1.00
Prerequisite: BRDC-123B
Accepted For Credit: CSU

This course focuses on laboratory practice utilizing knowledge and techniques gained in the radio programming and production courses. KOHL Radio serves as the operational lab. Repeatable = 3 times (GR)

BRDC-127B Radio Broadcast Lab
54.00 hrs lab
Units: 1.00
Prerequisite: BRDC-123B
Accepted For Credit: CSU

This course builds upon knowledge and techniques gained in BRDC-123A, BRDC-123B, and BRDC-127A. KOHL Radio serves as the operational lab. Repeatable = 3 times (GR)

BRDC-127C Radio Broadcast Lab
54.00 hrs lab
Units: 1.00
Prerequisite: BRDC-123B
Accepted For Credit: CSU

This course builds upon knowledge and techniques gained in BRDC-127B with emphasis on advanced content and on-air listener interaction. KOHL radio serves as the operational lab. Repeatable = 3 times (GR)

BRDC-127D Radio Broadcast Lab
54.00 hrs lab
Units: 1.00
Prerequisite: BRDC-123B
Accepted For Credit: CSU

This course builds upon knowledge and techniques gained in BRDC-127C with emphasis on live, on location broadcast situations. KOHL Radio serves as the operational lab. Repeatable = 3 times (GR)

BRDC-128 Radio Programming and Marketing
36.00 hrs lecture
Units: 2.00
Accepted For Credit: CSU

This course provides an overview of radio programming methods, strategies, promotion and evaluation techniques, and outlines the responsibilities of the professional radio program director. Repeatable = 1 time (GR)

BRDC-129 Digital Radio Studio Systems
18.00 hrs lecture, 108.00 hrs lab
Units: 3.00
Prerequisite: BRDC-123A
Accepted For Credit: CSU

Students taking this course are introduced to advanced operational techniques of digital radio studio systems. Lab assignments are completed in the KOHL studios using the RCS Master Control platform. Repeatable = 3 times (GR)

BRDC-130 Broadcast Announcing
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Accepted For Credit: CSU

Course concentration is on projection of personality, voice control, pronunciation, and related skills necessary for communication of ideas and information via broadcast. Students will learn important microphone techniques and put them to use under simulated broadcast circumstances. Repeatable = 1 time (GR)

BRDC-132 Studio Recording
54.00 hrs lecture, 18.00 hrs lab
Units: 3.00
Cross-referenced Course: MUS-113
Accepted For Credit: CSU

This course is an introduction to the recording studio. The course follows the path of audio signals through the microphone, mixer, signal processors, digital audio workstation (DAW), and monitoring stations. The course explores various types of microphones, the functions of virtual mixing boards, the characteristics of plug-in signal processors, and recording techniques. (GR)
BRDC-134  Final Cut Pro Editing  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Students learn the basics of editing a television package in the digital medium. Students will be trained in the use of Final Cut Pro non-linear editing system under the guidance of broadcast industry professionals. The course examines how cutting edge non-linear editing technology has its roots in film editing, explores similarities between the two, and contrasts both to video editing. The course covers the history of video storage media from 2” AMPEX tape through BETA, current formats including DV and HD. Students also develop storytelling skills. Repeatable = 1 time (GR)

BRDC-135  Final Cut Pro Suite-Master  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Students learn advanced techniques used in commercial film and video production. Students develop the ability to create polished transitions, edit multi-camera projects, work with nested sequences, the basics of keyframing and composite modes and how to use noise reduction in Soundtrack Pro to normalize audio tracks. Repeatable = 1 time (GR)

BRDC-136  Digital Video and Lighting  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
The basics of shooting a story using professional video cameras under the guidance of broadcast industry professionals. Course covers history of news recording from film to videotape and current memory stick formats. Students develop skills in video production, news gathering, lighting, and storytelling. Repeatable = 1 time (GR)

BRDC-137  Video Field Production  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Prerequisite: BRDC-136  
Accepted For Credit: CSU  
Students learn advanced techniques of shooting video for commercial television news. Repeatable = 1 time (GR)

BRDC-138  AVID Editing  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Students learn the basics of editing a television story using AVID non-linear editing system. Students also develop storytelling skills. Repeatable = 1 time (GC)

BRDC-141  Live TV Newscast  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Students write, report, anchor, shoot, and edit a weekly newscast which is then broadcast live on local cable and the Internet. Repeatable = 2 times (GC)

BRDC-142  Live TV Studio Production  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Students write, report, shoot, and edit feature stories and human-interest stories for broadcast on the college’s newscast, which are then broadcast live on local cable and the Internet. Repeatable = 1 time (GC)

BRDC-143  Video Field Production  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Prerequisite: BRDC-141 or BRDC-142  
Accepted For Credit: CSU  
Train to do on air play-by-play or be part of the behind-the-scenes production crew on live sports highlights shows and the live broadcast of Ohlone College sporting events. Repeatable = 2 times (GC)

BRDC-144  Sports Broadcasting  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Advisory: BRDC-136, BRDC-138, BRDC-141, BRDC-142, BRDC-148, or BRDC-152  
Accepted For Credit: CSU  
This course introduces accounting theory, procedures, and practices relating to financial accounting. (GR)

BRDC-145  Mass Media and Society  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Cross-referenced Course: JOUR-155  
Accepted For Credit: CSU & UC  
We swim in an ocean of media. Our thoughts, beliefs, life choices, jobs, government, and shopping decisions are all influenced by the media. Most of us complain about it, but we wouldn’t turn the media off, even if we could. Yet we don’t know much about it. Who decides what messages get sent? What do the senders want? How do we process the messages? How does the technology work? Your media exposure will continue for the rest of your life. This class aims to make you a more informed, critical consumer. (GR)

BUSINESS ADMINISTRATION

Division: Fine Arts, Business, and Communication Studies

BA-101A  Financial Accounting  
90.00 hrs lecture  
Units: 5.00  
Advisory: Eligible for ENGL-151B  
Accepted For Credit: CSU & UC  
This course is an introduction to managerial accounting including the analysis and interpretation of accounting data to aid management. (GR)

BA-101B  Managerial Accounting  
90.00 hrs lecture  
Units: 5.00  
Prerequisite: BA-101A  
Accepted For Credit: CSU & UC  
This course is an introduction to managerial accounting including the analysis and interpretation of accounting data to aid management. (GR)
BA-102 Principles of Economics-Macroeconomics
54.00 hrs lecture
Units: 3.00
Prerequisite: MATH-153
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
Introduction to Macroeconomics. The topics explored include
international economics. (GR)

BA-102B Principles of Economics-Microeconomics
54.00 hrs lecture
Units: 3.00
Prerequisite: MATH-153
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
Introduction to Microeconomics. The topics explored include
demand, supply, market structure, pricing policies, labor
market, elasticity and its application, public goods and
common resources, and environmental policy. (GR)

BA-104 Computer Applications in Accounting
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Prerequisite: BA-101A or BA-106
Accepted For Credit: CSU
This course covers the application of accounting theory on the
computer using spreadsheet software. (GR)

BA-105 Income Tax Principles
72.00 hrs lecture
Units: 4.00
Advisory: Eligible for ENGL-151B
Accepted For Credit: CSU
This course provides an analysis of the principles, procedures,
and terminology of income taxes on individual taxpayers. (GC)

BA-106 Applied Accounting
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-151A; concurrent enrollment in
BA-123
Accepted For Credit: CSU
This course covers fundamentals of accounting theory and
applications. (GC)

BA-107 Cost and Managerial Accounting
72.00 hrs lecture
Units: 4.00
Prerequisite: BA-101A and BA-101B
Accepted For Credit: CSU
This course presents the theory, procedures, and practice
relating to material, labor, and factory overhead production
costs, including job order, process, and standard cost systems.
It also includes analytical skills used to interpret accounting
data to be used by management in planning and controlling
business activities. (GC)

BA-109B Computerized Accounting for Small Business
22.50 hrs lecture, 13.50 hrs lab
Units: 1.50
Advisory: Concurrent enrollment in BA-101A or BA-106
This course is designed to meet the accounting needs of a
small business. A widely-used software package (such as
QuickBooks) will be presented. (GC)

BA-115 Career Communication
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: SPCH-115
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
Develop vital communication skills for global and diverse
professional environments including presentational skills,
interviewing, meeting management, small group
communication, and leadership skills. (GR)

BA-116 Business English and Communication
72.00 hrs lecture
Units: 4.00
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU
This course reviews the fundamentals of English grammar,
punctuation, and sentence structure from a business approach.
Writing skills for clear and effective business communication
are developed through letters and reports. (GC)

BA-121A Developing Your Business Plan
9.00 hrs lecture
Units: 0.50
This is a class designed for students considering starting their
own businesses. All major elements of a Business Plan will be
covered: financial statements, marketing, and competitive
strategies. (GC)

BA-121B Legal Aspects of Small Business
9.00 hrs lecture
Units: 0.50
This course is designed for students interested in establishing
a business and needing information about the legal issues
involved. The information is very practical and is presented in
a clear, concise manner. Legal aspects such as forms of
ownership, licensing, and taxes will be covered. (GC)

BA-123 Math for Accounting and Business
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-151B and MATH-151
Accepted For Credit: CSU
This course focuses on methods of problem interpretation and
solving of common business calculations. Problems such as
taxes, interest, depreciation, stocks, and insurance are covered
by means of lecture and individual operations of calculators
and computers. (GC)

BA-125 Introduction to Business
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This course examines the purposes, organization, and major
activities of business operations. Emphasis is placed on
understanding relationships of business, government, and the
consumer in a global economy. This is a survey course
designed to give students a brief outline of most of the major
activities in business. (GC)

BA-126 Introduction to Marketing
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-151B
Accepted For Credit: CSU
This course explores all fundamental aspects of marketing and
the role marketing plays in the overall context of business.
How markets develop, market segmentation and target
marketing, the 4Ps of marketing (product, price, promotion,
place), and marketing theory and practice are examined in
detail. (GC)
**BA-129 Introduction to Advertising**
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU  
This course is a study of the economic, sociological, and psychological dimensions of consumer motivation and behavior. This introductory course explores the broad fundamentals of advertising. (GC)

**BA-136 Introduction to International Business**
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
This course presents the latest theories and concepts of international business while highlighting the leading role culture plays in global commerce. (GC)

**BA-137 Introduction to International Marketing**
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
Survey course that covers the essential elements of international marketing, beginning with its definition and concluding with international marketing strategy implementation. (GC)

**BA-138A Services Export Marketing**
18.00 hrs lecture  
Units: 1.00  
Accepted For Credit: CSU  
An examination of marketing services in a global environment. This course will identify the unique cultural and structural challenges involved in exporting services and the strategies and tools to overcome these challenges. Students will also learn about service export market entry strategies, most promising service exports, and how to identify suitable export markets. (GR)

**BA-139 Psychology in the Workplace**
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: PSY-139  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This course applies principles of psychology to the workplace. Topics include combination skills, stress, cultural diversity, teamwork, understanding self and others, motivation, leadership, and other factors crucial to functioning effectively in the workplace. (GC)

**BA-140 Global Business Immersion**
36.00 hrs lecture  
Units: 2.00  
Advisory: ENGL-151A  
Accepted For Credit: CSU  
This course will revolve around a three-week study abroad program based in a particular country, focusing on global business in that country. Students will have an opportunity to explore directly the widest possible variation of business environments and practices. The course will also review the cultural, historical, and political environments which affect the business practices in that country. (GC)

**BA-141A Business Law**
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course is an introduction to law applicable to business including the legal environment of business, ethics, sustainability, contracts, agency, and sales law. This course also satisfies the real estate law requirement for the real estate certificate. (GC)

**BA-141C An Introduction to International Law**
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU  
This course is an introduction to international business law, featuring trade (import and export), licensing agreements for the transfer and protection of patents, copyrights, trademarks and intellectual property (including franchising), and active foreign investment through mergers, acquisitions, and joint ventures. (GC)

**BA-142 International Economics**
54.00 hrs lecture  
Units: 3.00  
Advisory: BA-102A, BA-102B  
Accepted For Credit: CSU  
Students study theories of the causes and effects underlying international economies with a focus on international trade, international finance, and the study of governmental policies that alter the pattern of trade between nations. (GR)

**BA-143 Sports Marketing**
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: KIN-243  
Accepted For Credit: CSU  
This course examines the application of the principles of promotion, sponsorship, sales, revenue, and marketing to the sport and fitness industry. The areas covered will include high school/collegiate athletics, professional sports, and the fitness club industry. (GC)

**BA-144 Sports Management**
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: KIN-244  
Accepted For Credit: CSU  
This course provides an overview of professional sport management in North America. The political, historical, social, economic, and cultural impacts of sport management are explored. Topics will include team management, organizational administration, legal issues, public relations, and facility management. Students will become familiar with career opportunities in the sports management field. (GR)

**BA-160A Computer Graphics I**
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: ART-160A, GA-160A, CS-160A  
Accepted For Credit: CSU & UC  
This course is an introduction to microcomputers and to the creation of computer-generated graphics. This course examines the variety of software/hardware tools and techniques available for the production of computer-made imagery. The emphasis is on hard-copy production using printers, plotters, and other reproduction methods. This course also covers design principles, business graphics, and elementary programming principles. Repeatable = 3 times (GC)
The following are descriptions of various courses:

**BA-160B Computer Graphics II**
- 54.00 hrs lecture, 54.00 hrs lab
- Units: 4.00
- Cross-referenced Course: ART-160B, GA-160B, CS-160B
- Prerequisite: ART-160A, BA-160A, GA-160A, CS-160A
- Accepted For Credit: CSU
- This course is a continuation of BA-160A. The emphasis in this course is on developing intermediate and advanced skills needed to operate a computer graphics work station. The students complete projects of their choice using more complex Paint and CAD software, printers, and plotters. Repeatable = 1 time (GC)

**BA-192 Service Learning Internship**
- 72.00 hrs lab
- Units: 1.00
- Accepted For Credit: CSU
- Service learning is a teaching and learning method that integrates community service with academic coursework as it focuses on critical, reflective thinking. Repeatable = 2 times (GC)

**BA-195A1 Work Experience Education – Vocational**
- 75.00 hrs lab
- Units: 1.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**BA-195A2 Work Experience Education – Vocational**
- 150.00 hrs lab
- Units: 2.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**BA-195A3 Work Experience Education – Vocational**
- 225.00 hrs lab
- Units: 3.00
- Accepted For Credit: CSU
- Work experience education for students employed in a job directly related to a major. Units received are based on hours worked. (GC)

**BA-195A4 Work Experience Education – Vocational**
- 300.00 hrs lab
- Units: 4.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**BSM-101 Fundamentals of Supervision**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU
- This course covers basic supervisory principles and practices: the supervisor’s job; politics/power; decision making; the functions of planning, organizing, and controlling; and quality control. (GC)

**BSM-102 Interpersonal Relations in the Workplace**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU
- This course covers interpersonal communications, employee-employer relations, ethnic cultural awareness, conflict resolution, stress, and team development. (GC)

**BSM-103 Management of Human Resources**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU
- This course covers principles and practices of human resources for first line and above managerial personnel; employment/industrial relations, equal employment opportunity, sexual harassment, training/development, wage/salary/benefit administration, job performance reviews, and safety/accident prevention. (GC)

**BSM-105 Operations Management**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU
- This course covers Operations Management: globalization; forecasting; materials/production/project management; total quality management principles and practices. (GC)

**BSM-106 Communication for Supervisors**
- 54.00 hrs lecture
- Units: 3.00
- Accepted For Credit: CSU
- This course covers the principles and practices of the theory of communications, including listening, intercultural communications, verbal and non-verbal communication, meetings, and presentations. (GC)

**BSM-108 Leadership in Organizations**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU
- This course covers principles of power and politics; team decision-making/problem solving; motivation coaching and counseling; law, social responsibility, and business ethics. (GC)

**BSM-195A1 Work Experience Education – Vocational**
- 75.00 hrs lab
- Units: 1.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**BSM-195A2 Work Experience Education – Vocational**
- 150.00 hrs lab
- Units: 2.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**BSM-195A3 Work Experience Education – Vocational**
- 225.00 hrs lab
- Units: 3.00
- Accepted For Credit: CSU
- Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)
BSM-195A4 Work Experience Education – Vocational
300.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
Work experience education for students employed in jobs
directly related to a major. Units received are based on hours
worked. (GC)

CHMT-103A Chemical Technology I
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Advisory: ENGL-151B, MATH-151
This is a basic course that covers chemical principles, plus
career and educational aspects of chemical technology. Topics
will cover chemical nomenclature, atoms and molecules and
their reactions, chemical and physical properties of materials,
and chemical principles. In addition, students will get hands-on
training in sample preparation, keeping lab notebooks,
industry-based data processing, operation of basic lab
equipment, and bioanalysis. This course will also cover
employment opportunities, job functions, and case studies of
workplace activities with hands-on industry-based labs. (GR)

CHMT-103B Chemical Technology II – Analytical Skills
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Prerequisite: CHMT-103A
Students gain extensive training in lab skills pertaining to
chemistry. The course focuses on the use of chemical
principles in chemical analysis. Topics include sample
preparation, SOPs, gravimetric analysis, titrimetric analysis,
qualitative and quantitative analysis, potentiometry, combustion
analysis, atomic spectroscopy, and electrochemistry. Analytical separations such as filtration,
recrystallization, sublimation, extraction, melting point analysis,
chromatography (TLC and column), gel electrophoresis, and
bioanalysis will also be taught. In addition, this course will
cover the scientific method, statistics of sampling, error
analysis, the analytical process, proper measurement
protocols, data processing, lab notebook protocols, and the
proper writing of industry-style lab reports. (GR)

CHMT-103B Chemical Technology II – Analytical Skills
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Cross-referenced Course: BIOT-104A
This course trains students in High Pressure Liquid
Chromatography, a technique used to separate and analyze
chemical mixtures. The course is designed for beginners and
intermediate level users in HPLC who want practical laboratory
experience. The lectures, supplemental by problem sets, slides,
and video presentations, provide the fundamentals needed to
understand the techniques and instrumentation involved in
this powerful analytical tool. Key topics include basic HPLC
instrumentation, detectors, including UV/Vis, photo diode
array, column selection, qualitative and quantitative analysis
and troubleshooting HPLC systems. (GR)

CHMT-104A HPLC
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Cross-referenced Course: BIOT-104A
This course trains students in High Pressure Liquid
Chromatography, a technique used to separate and analyze
chemical mixtures. The course is designed for beginners and
intermediate level users in HPLC who want practical laboratory
experience. The lectures, supplemental by problem sets, slides,
and video presentations, provide the fundamentals needed to
understand the techniques and instrumentation involved in
this powerful analytical tool. Key topics include basic HPLC
instrumentation, detectors, including UV/Vis, photo diode
array, column selection, qualitative and quantitative analysis
and troubleshooting HPLC systems. (GR)

CHMT-104B Gas Chromatography
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Cross-referenced Course: BIOT-104B
This course is designed for beginners and intermediate level
practitioners who want practical laboratory experience in gas
chromatography. This course provides the fundamentals
needed to understand the technique and instrumentation
involved in this powerful analytical tool and covers basic gas
chromatography theory, different columns, phases, qualitative
identification, data capture, quantitation, integration, practical
applications, and troubleshooting. At the end of the class the
student will have mastered the fundamentals of GC,
participated in extensive hands-on laboratory sessions, and
learned specialized techniques based on the student’s specific
interests. (GR)

CHMT-104C IR and UV/Vis Spectroscopy
4.50 hrs lecture, 13.50 hrs lab
Units: 0.50
Cross-referenced Course: BIOT-104C
Prerequisite: CHEM-106B or CHEM-109
A hands-on, lab-based course designed to introduce infrared
spectroscopy, this course outlines the various sample handling
methods and the numerous transmission and reflectance
methods available for infrared analysis. Lab-based lectures will
focus on Fourier Transform Infrared (FT-IR) spectroscopy and
its advantages, instrument set-up and parameters, and FT-IR
sample analysis methods. The course provides hands-on
training for obtaining representative infrared spectra of
analytical samples. Data manipulation, spectral analysis, and
functional group identification will also be taught. The course
will also focus on UV-Vis spectroscopy as a complementary
method to IR analysis. The UV-Vis spectroscopy will focus on
general principles such as wavelength, absorption,
transmittance, standard curves, Beer’s-Lambert’s Law, solvent
effects, hypsochromic and bathochromic shifts, chromophores,
conjugation, and UV spectral analysis. This course is designed
for all levels of UV-Vis/IR instrument users. (GR)
CHMT-104D  **Nuclear Magnetic Resonance Spectroscopy**  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Cross-referenced Course: BIOT-104D  
Prerequisite: CHEM-106B or CHEM-109  

An introductory lab-based course geared towards understanding the application of NMR spectroscopy for structural elucidation of compounds in the fields of organic chemistry, physical chemistry, and biochemistry. Topics include basic principles and theory of NMR and the application of chemical shifts, coupling constants, peak splitting, and peak integration to reveal the molecular structure. Labs will include important one-dimensional experiments and their application in assignments and structure determination problems. In addition, the students will get hands-on experience in acquiring NMR spectra using fundamental concepts of instrumentation such as shimming, sample probes, integration, peak and signal parameters, and basic troubleshooting. (GR)

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**CHEMISTRY**  
Division: Science, Technology, and Engineering

**CHEM-101A  General Chemistry**  
54.00 hrs lecture, 108.00 hrs lab  
Units: 5.00  
Prerequisite: CHEM-102 and MATH-152, or satisfactory performance on the Chemistry Placement Test at Ohlone College  
Advisory: CAOT-150  
Accepted For Credit: CSU & UC  

CHEM-101A is a general college-level inorganic chemistry course designed for students majoring in biology, chemistry, engineering, pre-med, and other fields demanding rigorous scientific preparation. Topics covered include atomic theory, stoichiometry, chemical reactions, introductory thermochemistry, theories of bonding, and the properties of solids, liquids, gases, and solutions. (GR)

**CHEM-101B  General Chemistry**  
54.00 hrs lecture, 108.00 hrs lab  
Units: 5.00  
Prerequisite: CHEM-101A  
Accepted For Credit: CSU & UC  

Chemistry 101B continues the study of chemistry taught in Chemistry 101A. Theory and mathematical applications are emphasized. This course is designed for science-oriented majors including biology, chemistry, engineering, and pre-professional health. Topics include kinetics, equilibrium, acids and bases, solubility, thermodynamics, electrochemistry, nuclear chemistry, properties of organic molecules, acids and bases, buffers, proteins, and compounds containing transition elements, organic chemistry, and coordination compounds. This course provides students with the necessary foundation for Organic Chemistry, CHEM-112A. (GR)

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**CHEM-102  Preparation for General Chemistry**  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: MATH-151  
Accepted For Credit: CSU & UC  

This course is a preparatory chemistry course covering the fundamentals of modern inorganic chemistry with emphasis on problem solving and mathematical calculations. Topics include classification of matter, atomic and molecular structure, chemical formula and nomenclature, chemical equations and stoichiometry, thermochemistry, and gas laws and solutions. Chemistry 102 is intended primarily as a preparation for students planning to take college level Chemistry 101A. This course is recommended for students who have been away from high school chemistry for more than two years or those whose previous chemistry background is inadequate for Chemistry 101A. (GR)

**CHEM-106A  Principles of Chemistry**  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: MATH-151  
Accepted For Credit: CSU & UC  

This is an introductory chemistry course for non-science majors who plan to transfer to programs which require two semesters of chemistry, other than CHEM-101A and CHEM-101B. Topics include dimensional analysis, nomenclature, atomic theory, bonding, chemical reactions, gas laws, solutions, and colligative properties. This course satisfies the general education requirements for non-science majors. (GR)

**CHEM-106B  Principles of Chemistry**  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CHEM-106A  
Accepted For Credit: CSU & UC  

This is an introductory chemistry course for non-science majors who plan to transfer to programs which require two semesters of chemistry, other than CHEM-101A and CHEM-101B. The course includes material from organic chemistry and biochemistry, including the major classes of organic molecules, basic reactions, the major processes which take place in body fluids, proteins, nucleic acids, and a brief overview of metabolism. This course satisfies the general education requirements for non-science majors. (GR)

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**Did you know??**

During 2010-2011 Ohlone’s athletic teams won three Coast Conference Championships (Women’s Basketball, Women’s Softball, and Men’s Baseball) and two sports reached the State Championship tournament (Men’s Baseball and Swimming)!
CHEM-108 Survey of Chemistry
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This is a general education, non-lab course about the chemistry of everyday things. Some of the topics considered are food, medicine, petroleum, pollution, plastics, cosmetics, and poisons. The course gives information about atoms and structure to help students interpret everyday occurrences from a molecular point of view. Concepts, not calculations, are emphasized. The course is intended for non-science majors wishing to satisfy the General Education science requirement for CSU and UC transfer institutions. (GC)

CHEM-109 Biochemistry for Health Science and Biotechnology
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Prerequisite: MATH-151
Accepted For Credit: CSU & UC
This course covers the basic concepts of inorganic and organic chemistry and biochemistry as they apply to the human body. It is open to all students; no previous chemistry required. This course satisfies the requirements of nursing, biotechnology, and related majors that require one semester of chemistry. Students preparing to enroll in CHEM-101A should enroll in CHEM-102. (GR)

CHEM-112A Organic Chemistry
54.00 hrs lecture, 108.00 hrs lab
Units: 5.00
Prerequisite: CHEM-101B
Accepted For Credit: CSU & UC
CHEM-112A is the first semester of organic chemistry for science-oriented, pre-professional health, and pre-engineering students. This course includes a study of important organic molecules found in living systems and man-made molecules. This course is designed primarily for students who require a full year of organic chemistry, including multistep synthesis and heterocyclic compounds and advanced spectroscopy. (GR)

CHEM-112B Organic Chemistry
54.00 hrs lecture, 108.00 hrs lab
Units: 5.00
Prerequisite: CHEM-112A
Accepted For Credit: CSU & UC
CHEM-112B is the second semester of organic chemistry for science oriented, pre-professional health, and pre-engineering students. This course includes a study of important organic molecules found in living systems and man-made molecules. This course is designed primarily for students who require a full year of organic chemistry, including nomenclature, multistep synthesis, mechanisms and heterocyclic compounds and spectroscopy. (GR)

CHEM-131D Review of Chemistry Concepts
18.00 hrs lecture
Units: 1.00
This course is designed to review the content in selected Chemistry course(s). It is an introduction to study techniques and more in-depth discussions of chemistry principles and problem solving. Repeatable = 3 times (CR)

CHEM-190 Scientific Research Methodology
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Prerequisite: Consent of instructor
Advisory: MATH-188; major in science, technology, engineering, or math
This course introduces students to scientific research methods. It includes hypothesis writing, variable identification, experimental design, literature reviews, data interpretation and analysis, research proposal preparation, and presentation of scientific papers. (GR)

CHICANO STUDIES
Division: Humanities, Social Sciences, and Mathematics

CHS-101 Chicano Culture I
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: SOC-106
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course examines the social, cultural, political, and economic heritage of the Chicanos and their contribution to American society. (GR)

CHS-102 Chicano History
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: HIST-112
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
This course covers the development of Chicano history. Special emphasis will be placed upon the influence of Chicano history on contemporary institutions, particularly in the Southwest and California. (GC)

CHS-106A Chicano Literature
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This course offers an introduction to writing by Chicanos. Through performing in-depth studies of certain authors, the students will view literature as a reflection of Chicano life. (GC)

CHS-109 Barrio Fieldwork
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
Observation of selected barrios, institutions, agencies. (GR)

CHS-112 Contemporary Issues of Chicanas
54.00 hrs lecture
Units: 3.00
Prerequisite: ENGL-163; eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course is an examination of the historical, social-economic, and political conditions which have shaped the lives of contemporary Chicanas in the United States. It will explore cultural patterns underlying race, class, and gender-based strategies and inequities as basic elements of contemporary social structure. (GC)
**CHINESE**

Division: Humanities, Social Sciences, and Mathematics

**CHIN-101A**  
Elementary Mandarin Chinese I  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Accepted For Credit: CSU & UC  
This course is an introduction to modern standard Chinese language (Mandarin). Students will acquire listening, speaking, reading, and writing skills in or to communicate effectively in simple Chinese for common everyday purposes. This course teaches the Chinese phonetic system, the structures of Chinese characters, the basic Chinese grammatical concepts, and aspects of Chinese culture in relation to the topic of the concurrent lesson. (GR)

**CHIN-101B**  
Elementary Mandarin Chinese II  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: CHIN-101A or two years of high school Chinese  
Accepted For Credit: CSU & UC  
This course is a continuation of CHIN-101A. Students will continue to acquire listening, speaking, reading and writing skills in Chinese (Mandarin) and will continue cultural studies as an integral part of the course. (GR)

**CHIN-102A**  
Intermediate Mandarin Chinese I  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: CHIN-101B or three years of high school Chinese  
Accepted For Credit: CSU & UC  
This course is a continuation of CHIN-101B with emphasis on the four areas of listening, speaking, reading, and writing in Mandarin, as well as the study of Chinese culture with greater depth. (GR)

**CHIN-102B**  
Intermediate Mandarin Chinese II  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: CHIN-102A  
Accepted For Credit: CSU & UC  
This course is a continuation of CHIN-102A with emphasis on the four areas of listening, speaking, reading, and writing in Mandarin, as well as the study of Chinese culture with greater depth. (GR)

**CHIN-121B**  
Mandarin Chinese Conversation II  
54.00 hrs lecture  
Units: 3.00  
Prerequisite: CHIN-121A  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU  
This course is a continuation of CHIN-121A, an introduction to the study of speaking, reading, and writing the Chinese language (Mandarin) at the college level with emphasis on daily conversation in cultural contexts. (GC)

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**COMMUNICATION**

Division: Fine Arts, Business, and Communication Studies

**COMM-100**  
Introduction to Communication Theory  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
Analyze and evaluate the major communication theories and research in the communication studies field. (GR)

**COMM-108**  
Visual Communication  
54.00 hrs lecture, 36 hrs lab  
Units: 3.00  
Cross-referenced Course: MM-108  
Accepted For Credit: CSU & UC  
This course explores the fundamental elements of visual communication presented through lectures and applied through studio experiences. Examine the methods of visual communication from Gutenberg to Google, analyzing examples in a variety of visual forms including print (newspaper and magazine), graphics, illustrations, photographs, video, motion pictures, and digital media. (GR)

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**COMPUTER APPLICATIONS AND OCCUPATIONAL TECHNOLOGY**

Division: Learning Resources and Academic Technology

**CAOT-101A**  
Computer Applications I  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Cross-referenced Course: CS-101A  
Advisory: CS-101  
Accepted For Credit: CSU  
This course is the first in a three part series covering topics which include how to use Word documents, spreadsheets, database management programs, presentation graphics, and how to effectively use personal information manager programs. Students will also learn how to integrate program components. Formerly CAOT-101L. Repeatable = 1 time (GC)

**CAOT-101B**  
Computer Applications II  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Advisory: CAOT-101A  
Accepted For Credit: CSU  
This course is the second in a three part series covering topics which include how to use Word documents, spreadsheets, database management programs, presentation graphics, and how to effectively use personal information manager programs. Students will also learn how to integrate program components. (GC)

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**Did you know???

Transfer students from community colleges to the University of California account for 48% of UC’s bachelor’s degrees in science, technology, engineering, and mathematics.**

Source: Community College League of California
CAOT-101C  Computer Applications III  
27.00 hrs lecture, 2700 hrs lab  
Units: 2.00  
Advisory: CAOT-10B  
Accepted For Credit: CSU  
This course is the third in a three part series covering topics which include how to use Word documents, spreadsheets, database management programs, presentation graphics, and how to effectively use personal information manager programs. Students will also learn how to integrate program components. (GC) 

CAOT-104  Basic Keyboarding  
54.00 hrs lab  
Units: 1.00  
This self-paced introductory course develops basic keyboarding skills for students entering a variety of fields such as computer science, data processing, accounting, or any other occupation that utilizes a keyboard similar to a typewriter to input information. No typing applications will be covered. Repeatable = 3 times (GC) 

CAOT-110A  Beginning Keyboarding  
9.00 hrs lecture, 2700 hrs lab  
Units: 1.00  
This self-paced course includes mastery of the keyboard with touch typing. Repeatable = 1 time (GC) 

CAOT-110B  Beginning Keyboarding II  
9.00 hrs lecture, 2700 hrs lab  
Units: 1.00  
Prerequisite: CAOT-110A  
This self-paced course includes an introduction to business and personal letters, tabulation, and business reports. Repeatable = 3 times (GC) 

CAOT-110C  Beginning Keyboarding III  
9.00 hrs lecture, 2700 hrs lab  
Units: 1.00  
CAOT-110C is the final course in a three-part series where students learn mastery of creating and formatting business documents. Repeatable = 3 times (GC) 

CAOT-111  Intermediate Keyboarding  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Advisory: CAOT-110C or one year high school typewriting  
This self-paced course includes improvement of basic skills, letter production, business forms, tabulated reports, and manuscripts. (GC) 

CAOT-112  Advanced Keyboarding  
18.00 hrs lecture, 54.00 hrs lab  
Units: 2.00  
Prerequisite: CAOT-111 or two years high school typing  
This self-paced course includes production typing with emphasis on speed and accuracy in the preparation of business letters, legal forms, financial statements, and manuscripts. (GC) 

CAOT-120  ESL and Basic Computer Skills (Part I)  
18.00 hrs lecture, 2700 hrs lab  
Units: 1.50  
This course combines language learning with training in basic computer skills. This course has been designed to help non-native speakers of English develop entry-level computer and communication skills. Not applicable to associate degree. Repeatable = 3 times (GC) 

CAOT-134A  Beginning Microsoft Access  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: Eligible for ENGL-151B and ENGL-163  
This is a beginning database course using Microsoft Access, which reviews basic database concepts and teaches database skills. This course is the first of three sequencing courses in the Microsoft Office Suite. Repeatable = 2 times (GC) 

CAOT-134B  Intermediate Microsoft Access  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: Eligible for ENGL-151B and ENGL-163  
This is an intermediate database course using Microsoft Access, which reviews basic database concepts and teaches database skills. This course is the second of three sequencing courses in the Microsoft Office Suite. Repeatable = 1 time (GC) 

CAOT-146  Computer Applications in Engineering  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Corequisite: ENGI-101  
This course introduces basic computer skills necessary to perform tasks required in an introductory Engineering course. This course covers key concepts in MS Word, Excel, PowerPoint, Internet functions and etiquette. Repeatable = 1 time (GR) 

CAOT-147  Computer Applications in Biology  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Corequisite: BIOL-101A  
This course introduces basic computer skills necessary to perform tasks required for biology majors. This course covers key concepts in Excel, PowerPoint, and Access. This course must be taken concurrently with BIOL-101A. (GR) 

CAOT-148  Computer Applications in Biotechnology  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Corequisite: BIOT-105  
This course introduces basic computer skills necessary to perform tasks required in an introductory biotechnology course. This course covers key concepts in Excel, PowerPoint, and Access. Repeatable = 1 time (GR) 

CAOT-150  Computer Applications for Chemistry  
9.00 hrs lecture, 27.00 hrs lab  
Units: 1.00  
Corequisite: CHEM-101A  
This course introduces basic computer skills necessary to perform tasks required in an introductory Chemistry course. This course covers key concepts in Excel, PowerPoint, and Word. Repeatable = 1 time (GR) 

CAOT-153  Introduction to Internet  
18.00 hrs lecture  
Units: 1.00  
Advisory: CS-101  
Accepted For Credit: CSU  
This course is an introduction to the Internet. The course will describe the history and architecture of the Internet and will demonstrate how to use various services and tools of the Internet, including Web browsers and search engines, how to do legal research, cyberlaw, and knowledge of HTML. (GC)
CAOT-161A  Digital Graphics I  
18.00 hrs lecture, 54.00 hrs lab  
Units: 2.00  
Cross-referenced Course: ART-161A, GA-161A  
Accepted For Credit: CSU  
This course is an overview of computer graphics on desktop computers for graphic designers, artists, typographers, and for business applications. This course will cover hardware and software including: laser printers, ink jet printers, scanners, tablets, and bit-mapped and vector-based graphics programs. This course also covers design principles and business graphics. The course emphasis is on the creation of a portfolio of computer graphics drawings. Repeatable = 3 times (GC)

CAOT-161B  Digital Graphics II  
18.00 hrs lecture, 54.00 hrs lab  
Units: 2.00  
Cross-referenced Course: ART-161B, GA-161B  
Prerequisite: GA-161A, ART-161A, or CAOT-161A  
Accepted For Credit: CSU  
This course is a continuation of CAOT-161A. The emphasis in this course is on developing intermediate and advanced skills used to set up and operate a digital graphics work station and publish on the Web. Students complete projects of their choice using complex graphics software, scanners, tablets, and printers. The course emphasis is on the continued development of a portfolio of computer images. Repeatable = 3 times (GC)

CAOT-166  2D Drafting with AutoCAD  
45.00 hrs lecture, 2700 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
This course introduces the basic drafting concepts, and AutoCAD tools to create 2D drawings. It teaches fundamental skills for drafting and engineering students. (GC)

CAOT-167  3D Drafting with AutoCAD  
45.00 hrs lecture, 2700 hrs lab  
Units: 3.00  
Advisory: CAOT-166  
Accepted For Credit: CSU  
This course introduces the advanced drafting concepts of AutoCAD for three dimensional design and for connecting it with other industrial software programs. It teaches fundamental skills for drafting and engineering students. (GC)

CAOT-187  PowerPoint Presentations  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: Eligible for ENGL-151B and ENGL-163  
This is an introductory course in creating presentations with Microsoft PowerPoint software on an IBM computer with mention of the MAC platform. Presentations – which include slides, lecture notes and handout pages – will be created, edited, and printed. Repeatable = 1 time (GC)

CAOT-193A  Beginning Excel  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: Eligible for ENGL-151B and ENGL-163  
This is an introductory course in the use of microcomputer spreadsheets for business applications. Topics include basic commands, developing spreadsheet models, and using printing options. Repeatable = 1 time (GC)

CAOT-193B  Intermediate Excel  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: CAOT-193A; eligible for ENGL-151B, ENGL-163  
This is an intermediate course in the use of microcomputer spreadsheet for business applications. Topics include using mixed cell references, large worksheets, simple database functions, charts, and working with multiple worksheets. Repeatable = 1 time (GC)

CAOT-193C  Advanced Excel  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: CAOT-193B; eligible for ENGL-151B, ENGL-163  
This is an advanced course in the use of Excel for business applications. Topics include working with multiple worksheets, examining cost-volume-profit relationships and “what if” analyses, importing files and tables, and retrieving data from the World Wide Web. Repeatable = 1 time (GC)

CAOT-195A1  Work Experience Education – Vocational  
75.00 hrs lab  
Units: 1.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

CAOT-195A2  Work Experience Education – Vocational  
150.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

CAOT-195A3  Work Experience Education – Vocational  
225.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

CAOT-195A4  Work Experience Education – Vocational  
300.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

“I want my kids to be proud of their mother and I also want other mothers to see that if I can do it with three kids they too can also continue their education.”

Abelina Campos  
James Leal Law Enforcement Scholarship Recipient  
Future goals: Earn an Associate in Arts degree in Administration of Justice
CNET-101 Introduction to Computers and Information Technology
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: CS-101
Advisory: Eligible for ENGL-151B and ENGL-163; concurrent enrollment in CS-101A
Accepted For Credit: CSU & UC
This course is a general introduction to the area of computers and information technology and is designed for all students. This survey course will examine a broad overview of topics including software, hardware, the networking of computer systems, and information technology. Students will explore the implications of this technology with regard to today's information society. (GC)

CNET-102 Information and Communication Technology – Web 2.0
54.00 hrs lecture
Units: 3.00
Advisory: CS/CNET-101
Accepted For Credit: CSU
This course is a general introduction to the application of information and communication technology (ICT), and is designed for students who have a focused interest in connecting, collaborating and sharing knowledge. This course will examine Web 2.0 applications and services – such as social-networking sites, wikis, and folksonomies – which aim to facilitate collaboration and sharing between users. (GC)

CNET-105 PC Hardware and Software
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
This course includes hardware and software topics relevant to personal computer (PC) troubleshooting. Emphasis is placed on developing essential troubleshooting and repair skills and preparation for the A+ certification exam. Repeatable = 3 times (GC)

CNET-108 IT Project Management
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
Learn the concepts and skills that build the foundations of project management – project integration, scope, time, cost, quality, human resources, communications, risk, and procurement – within an information technology environment. (GC)

CNET-114 How Technology Works
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: ENGI-114
Accepted For Credit: CSU
This course is intended for students of all disciplines who are interested in how everyday things work. It is an introduction to some of the fundamental science concepts underpinning high technology, emphasizing everyday devices and practical experience, for the development of scientific and computer literacy. Students will experiment with technology to discover principles of science. Concepts such as force, work, energy, power, liquids and gasses, heat transfer, electricity, magnetism, electronics, light, materials science, and time are explored through experimentation and observation. Students will experience through class demonstrations and hands-on laboratories the concepts presented by the instructor. Phenomena such as how computers convert data, how iPods transmit sound, how electronic thermometers measure temperature, how solar heating panels capture heat, and how GPSs use microwaves will be explored. Field trips to local tech industry displays are required. (GC)

CNET-115 Introduction to Robotics and Automated Systems
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: ENGI-135
Accepted For Credit: CSU
Students who take this class will understand how scientific innovation can affect their lives either directly or indirectly. The class will teach students the principles of scientific methodology as it is applied to solving problems. The application of this scientific method will be used to navigate an abundance of technical information – to obtain the information, to understand the information, and to determine how to apply it. This course describes the functional hardware and software components of automated systems. The student will experience how scientific principles are applied by building and programming robots. The emphasis is for students to learn science by actually doing science. Repeatable = 3 times (GC)
CNET-136 Introduction to Programming Using Robotics  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
This course is designed to teach the beginning programmer how code programs using robots. Emphasis will be placed on basic Java programming concepts and skills. A “Create” robot from iRobot is used by the student to exercise their new programming skills. The student will have the opportunity to extend the mechanical functionality of the base robot and program sensors they attach to the robot. (GR)

CNET-135 Database Fundamentals I:  
Database Architecture and Administration  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Advisory: Knowledge of SQL or knowledge of a programming language  
Accepted For Credit: CSU  
In this course students learn to startup and shutdown a database, create a database, manage file and database storage, and manage users and their privileges. In addition, students learn to organize the database and to move data into and between databases. Hands-on practices help to reinforce key concepts and students have an opportunity to troubleshoot real life issues when they are given examples of typical problems encountered when operating an Oracle database. (GC)

CNET-136 Database Fundamentals II:  
Database Backup and Recovery  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
This course addresses backup and recovery techniques and examines various backup, failure, restore, and recovery scenarios for current versions of Oracle databases. Participants utilize multiple strategies and Oracle tools such as Recovery Manager to perform backups and restore and recovery operations. Participants have the opportunity to apply some of the more advanced techniques within a workshop environment. In addition to lecture and hands-on learning, this class addresses answers to frequently asked questions concerning backup and recovery. Repeatable = 2 times (GC)

CNET-137 Introduction to SQL  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: CS-137  
Advisory: CS-101A or CNET-101L  
Accepted For Credit: CSU  
This course covers the concepts of relational databases and powerful SQL. Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. Demonstrations and hands-on practice reinforce the fundamental concepts. (GC)

CNET-138 PL/SQL Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CS-137 or CNET-137  
Accepted For Credit: CSU  
Students learn to program in PL/SQL and understand the use of this programming language. Students learn to create PL/SQL blocks of application code that can be used by forms and reports. Students learn to create procedures, functions, packages, to manage dependencies, to manipulate large objects, and built-in packages. Repeatable = 2 times (GC)

CNET-140A Linux Installation and Configuration  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Prerequisite: CNET-150; CS-146 or CNET-146  
Accepted For Credit: CSU  
This course introduces the functions and features of the Linux operating system including the file system, system services, processes, background processing, scheduling, and security. The course supplies students with the information they need to install and configure Linux on a personal computer. Students will get practical experience in installing, administering, and troubleshooting Linux systems. This course is preparation for Sair Linux and GNU certification. Repeatable = 3 times (GC)

CNET-140B Linux System Administration  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Prerequisite: CNET-150; CS-146 or CNET-146  
Advisory: CNET-140A  
Accepted For Credit: CSU  
This course introduces the fundamental knowledge and skills needed to install, manage, and maintain a Linux computer system. Advanced system management tasks like file system management, patching, rebuilding the kernal, configuring networking interfaces, and system monitoring are performed in the computer lab. Shell programming and the various shells are introduced, and students will learn to write shell script programs to perform various system tasks. This course is preparation for Sair Linux and GNU certification. Repeatable = 3 times (GC)

CNET-141A Linux Apache Web Server Administration  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
This course is designed to give the student a working knowledge of web pages developed with Hypertext Markup Language (HTML), PHP: Hypertext Preprocessor (PHP), and Java Server Page (JSP). Students will install and configure the Apache Web server, the MySQL database for simple datastore purposes, and the Tomcat servlet container. Repeatable = 3 times (GC)

CNET-142A Linux Networking  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Prerequisite: CNET-150; CS-146 or CNET-146  
Advisory: CNET-140A, CNET-140B  
Accepted For Credit: CSU  
This course introduces the functions and features of the Linux operating system in Network. The course describes the major client and server services that are found in most networked computer systems. Students will implement in the computer lab such services as telnet, ftp, rsh, rlogin, web, mail, dns, samba, and dhcp. This course is preparation for Sair Linux and GNU certification. Repeatable = 3 times (GC)

CNET-142B Linux Security  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Prerequisite: CNET-150; CS-146 or CNET-146  
Advisory: CNET-140A, CNET-140B  
Accepted For Credit: CSU  
Students with Linux experience will gain knowledge and skills in implementing Linux security. This course is preparation for Sair Linux and GNU certification. Repeatable = 3 times (GC)
CNET-145 PHP Programming with MySQL
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: CS-145
Accepted For Credit: CSU
This is a programming class teaching the student how to access a relational database (MySQL) and generate web pages using PHP. The student does not need prior programming experience but general computer knowledge is recommended. (GC)

CNET-146 Introduction to UNIX/Linux
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Cross-referenced Course: CS-146
Advisory: CNET-150
Accepted For Credit: CSU
This hands-on course introduces functions of and features of UNIX/Linux operating system, including origin and evolution, hardware and software, graphical user interface, files and file system structure, system services, processes, background processing, scheduling, file security, editors, file sharing, and redirection and piping. Students are introduced to networking and internetworking, internet, shell programming, and a variety of UNIX/Linux tools commonly used for software development and system administration in a UNIX/Linux environment. Repeatable = 3 times (GC)

CNET-147 UNIX/Linux Shell Scripting
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: CS-147
Advisory: CS-102
Accepted For Credit: CSU & UC
This hands-on course introduces a variety of tools and concepts used for working with a UNIX/Linux-based computer system. The course will present the concept of a shell and describe differences between Bourne, Berkeley C, Korn, and Bash shells. Students will be given instruction and assignments in the use of vi, sed, awk and other tools as time and interest permit. Students will write shell script programs to exercise their understanding of tools and concepts. Repeatable = 3 times (GC)

CNET-149 PERL Programming
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: CS-149
Advisory: CS-102
Accepted For Credit: CSU & UC
This course presents the fundamental knowledge and skills needed to solve problems using the PERL language. This language is particularly well suited to manipulating textual data and remains a favorite among UNIX system administrators for automating common administrative tasks and widespread among web masters for writing CGI applications. (GC)

CNET-150 Network Operating Systems
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Advisory: CS-101 or CNET-101
Accepted For Credit: CSU
This course provides an in-depth study of Network Operating Systems. The web-based curriculum, sponsored by Hewlett-Packard Company, is an intensive introduction to multi-tasking network operating systems. Characteristics of the Linux, Windows 2000, NT, and XP network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back up procedures, and remote access. This course provides the foundation for student preparing to take the CompTIA A+ certification exam. Repeatable = 3 times (GC)

CNET-152 Data Communications
36.00 hrs lecture
Units: 2.00
Cross-referenced Course: CS-152
Accepted For Credit: CSU
This course is an introduction to data communications. It will include Internet, e-mail, modems, communication protocol, local area networks, wide area networks, network design, and management. (GC)

CNET-154 Network Technician Training
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
This course prepares students for the knowledge and skills required to successfully install, operate, and troubleshoot a small branch office network. The course includes topics on networking fundamentals; connecting to a WAN; basic security and wireless concepts; routing and switching fundamentals; the TCP/IP and OSI models; IP addressing; WAN technologies; operating and configuring IOS devices; configuring RIPv2, static and default routing; implementing NAT and DHCP; and configuring simple networks. Repeatable = 2 times (GC)

CNET-155A Network Fundamentals
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Advisory: CS-152 or CNET-152; CNET-150
Accepted For Credit: CSU
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. At the end of the course, students build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. This course is preparation for the Cisco Certified Networking Associate (CCNA) certification. Repeatable = 3 times (GC)

CNET-155B Routing Protocols and Concepts
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Advisory: CNET-155A
Accepted For Credit: CSU
This course describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. By the end of this course, students will be able to recognize and correct common routing issues and problems. This course is preparation for the Cisco Certified Networking Associate (CCNA) certification. Repeatable = 3 times (GC)
CNET-156A  LAN Switching and Wireless
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Advisory: CNET-155A
Accepted For Credit: CSU
This course focuses on the technologies and protocols needed to design and implement a converged switched network. Students will learn how to configure a switch for basic functionality and implement virtual LANs, VTP, and Inter-VLAN routing in a converged network. The different implementations of Spanning Tree Protocol in a converged network are presented and students will develop the knowledge and skills necessary to implement a WLAN (wireless LAN) in a small-to-medium network. This course is preparation for the Cisco Certified Network Associate (CCNA) certification. Repeatable = 3 times (GC)

CNET-156B  WAN Design and Support
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Advisory: CNET-155A, CNET-155B, and CNET-156A
Accepted For Credit: CSU
This is the last of four courses designed to introduce students to current and emerging networking technology. The focus of this course is on Wide Area Network (WAN) technologies. This course is preparation for the Cisco Certified Networking Associate (CCNA) certification. Repeatable = 3 times (GC)

CNET-157  TCP/IP and Internetworking
54.00 hrs lecture
Units: 3.00
Cross-referenced Course: CS-157
Prerequisite: CS-152 or CNET-152
Advisory: CS-101 or CNET-101
Accepted For Credit: CSU
This course provides an introduction and overview of TCP/IP technology. Topics include TCP/IP concepts, protocol architecture, and installation techniques. It prepares the student to pass the certification exam, Internetworking Microsoft TCP/IP, to become an MCP/MCSE. Repeatable = 3 times (GR)

CNET-158  Wireless Networks
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Prerequisite: CNET-150
Advisory: CNET-105, CNET-155A
Accepted For Credit: CSU
This introductory course to wireless communication and LANs focuses on the design, planning, implementation, operation and troubleshooting of Wireless LANs. It covers a comprehensive overview of technologies, security, and design best practices with particular emphasis on hands on skills. Repeatable = 3 times (GC)

CNET-160A  Microsoft Client Operating Systems
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Prerequisite: CNET-150
Advisory: CS-152 or CNET-152
Accepted For Credit: CSU
This course provides students with the knowledge and skills necessary to set up and support the Windows Client Operating System and prepare for the corresponding Microsoft Certified Professional (MCP), a core requirement on the MCSA and MCSE track. Students will get practical experience installing, administering, and troubleshooting this next-generation desktop environment. Repeatable = 3 times (GC)

CNET-161A  Desktop Support I – Supporting Users
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
This course is designed to provide individuals who are new to Microsoft Windows XP with the knowledge and skills necessary to troubleshoot the basic problems end users will face while running Microsoft Windows XP Professional in an Active Directory network environment or Windows XP Home edition in a workgroup environment. This is an introductory course designed to provide an overview of system concepts and how to troubleshoot Windows XP. Repeatable = 3 times (GC)

CNET-161B  Desktop Support II – Supporting Applications
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
Students in this class will learn how to support end users who run Microsoft Windows XP Professional in a corporate environment or Microsoft Windows XP Home edition in a home environment. They gain experience using applications that are included with the operating system, such as Microsoft Internet Explorer and Microsoft Outlook Express, as well as the productivity applications used in a corporate environment, such as Microsoft Office applications. Students will learn how to resolve operating system issues by telephone, by connecting to an end user’s system remotely, or by visiting an end user’s desktop. They should have a working knowledge of operating in a workgroup or Active Directory domain environment and how end users are affected by each environment. Repeatable = 3 times (GC)

CNET-162A  Microsoft Server Operating Systems
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Prerequisite: CNET-150
Advisory: CNET-160A
Accepted For Credit: CSU
This course provides students with the knowledge and skills necessary to set up and support the Microsoft Windows Server operating system and prepare for the corresponding Microsoft Certified Professional (MCP), a core requirement on the new MCSA and MCSE track. Students will get practical experience installing, administering, and troubleshooting this powerful enterprise server system. Repeatable = 3 times (GC)

CNET-162B  Windows Network Infrastructure Administration
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Prerequisite: CNET-150
Advisory: CNET-160A; CNET-162A; CS-152 or CNET-152; CS-157 or CNET-157
Accepted For Credit: CSU
This course prepares students as product support professionals who will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows Server products and prepare for the corresponding Microsoft Certified Professional (MCP) Exam, a core requirement on the MCSE track and elective credit on the MCSA track. Repeatable = 3 times (GC)
A course is designed to provide students with the information and skills needed to create a networking services infrastructure design that supports the required network applications in a Microsoft Windows network environment. This course prepares students for the corresponding Microsoft Certified Professional (MCP) exam, a core requirement on the MCSE track. Repeatable = 3 times (GC)

This course provides students with the knowledge and skills necessary to design a Microsoft Windows directory services infrastructure in an enterprise network. This course prepares students for the corresponding Microsoft Certified Professional (MCP) exam, a core requirement on the MCSE track. Repeatable = 3 times (GC)

This course provides students with the knowledge and skills necessary to design a secure Microsoft Windows network infrastructure in an enterprise network. This course prepares students for the corresponding Microsoft Certified Professional (MCP) Exam, a core requirement on the MCSE track. Repeatable = 3 times (GC)

This course teaches students the knowledge and skills necessary to install, configure, and administer Microsoft Internet Security and Acceleration (ISA) Server 2000 in an enterprise environment and experience setting up a Web site. This course prepares students for MCP+Internet/MCSE certifications. Repeatable = 3 times (GC)

This course teaches students the knowledge and skills necessary to install, configure, and administer Microsoft Internet Security and Acceleration (ISA) Server 2000 in an enterprise environment and experience setting up a Web site. This course prepares students for MCP+Internet/MCSE certifications. Repeatable = 3 times (GC)

This course provides an in-depth study of Network Security fundamentals and provides a comprehensive overview of network security. The class is broken down into five sections: General Security Concepts, Communication Security, Infrastructure Security, Cryptography, and Operational/Organizational Security. This course provides the foundation for students preparing to take the CompTIA Security+ certification exam. Repeatable = 3 times (GC)

This course provides an in-depth study of Network Security fundamentals and provides a comprehensive overview of network security. The class is broken down into five sections: General Security Concepts, Communication Security, Infrastructure Security, Cryptography, and Operational/Organizational Security. This course provides the foundation for students preparing to take the CompTIA Security+ certification exam. Repeatable = 3 times (GC)

This course introduces students to Microsoft SQL Server System Administration and prepares them to install and/or upgrade to SQL Server. The course also allows students to prepare for the corresponding Microsoft Certified Professional (MCP) exam, an elective requirement on the MCSE and MCSE track. Repeatable = 3 times (GC)

This course introduces students to Microsoft SQL Server System Administration and prepares them to install and/or upgrade to SQL Server. The course also allows students to prepare for the corresponding Microsoft Certified Professional (MCP) exam, an elective requirement on the MCSE and MCSE track. Repeatable = 3 times (GC)

This course focuses on the overall security processes in a network with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products, and solutions; firewall and secure router design, installation, configuration, and maintenance; AAA implementation using routers and firewalls; and securing the network at both layers 2 and 3 of the OSI model. Repeatable = 3 times (GC)
CNET-172B  Cisco Network Security II (CCSP)
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
This course focuses on the overall security process in a network with particular emphasis on hands-on skills in the following areas: security policy design and management; security technologies, products, and solutions; firewall and secure router design, installation, configuration, and maintenance; intrusion prevention (IPS) implementation using routers and firewalls; VPN implementation using routers and firewalls. Repeatable = 3 times (GC)

CNET-180  IP Telephony and VoIP Implementation
27.00 hrs lecture, 27.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
The course offers an overview of the issues related to carrying voice on a data network, the protocols used, and the issues associated with QoS, troubleshooting, security, and design. The course begins with describing the basic technologies used in the Public Switched Telephone System. It then describes the challenges and technologies used to send voice calls over a packet switch network like the Internet. Repeatable = 2 times (GC)

CNET-182  Advanced Routing
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Accepted For Credit: CSU
This is the first of four courses leading to the Cisco Certified Network Professional (CCNP) designation. This course introduces students to scaling IP networks. Students learn to use VLSM, private addressing, and NAT optimize IP address utilization. The majority of the course content is related to learning how to implement the RIPV2, EIGRP, OSPF, IS-IS, and BGP routing protocols. In addition, the course details the important techniques used for multicasting, route filtering and route redistribution. This course will prepare students for the Cisco Certified Networking Professional (CCNP) exam: 642-901 exam. Repeatable = 3 times (GC)

CNET-183  Implementing Cisco Secure WANs CCNP II
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Accepted For Credit: CSU
This is the second of four courses of the advanced study of Cisco Networking Academy. Students will gain classroom and laboratory experience in current and emerging networking technology that will prepare them for the Cisco Certified Networking Professional (CCNP) exam: 642-825 Implementing Cisco Secure WANS (ICSN). Instruction includes DSL, PPPoE, PPPoA, MPLS, Frame Relay, VPN, how to build a remote access network to interconnect central sites to branch offices and home office/telecommuters, and to control access to the central site, as well as maximize bandwidth utilization over the remote links. Repeatable = 3 times (GC)

CNET-184  Advanced Switching (Cisco Networking Academy CCNP III)
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Accepted For Credit: CSU
This course enables learners to use appropriate technologies to build scalable multilayer switched networks, to create and deploy a global intranet, and to implement basic troubleshooting techniques in environments that use Cisco multilayer switches for client hosts and services. This course also enables learners to improve traffic flow, reliability, redundancy, and performance for LAN switching that is self-supported or transported via a service provider. This course will prepare students for the Cisco Certified Networking Professional (CCNP) exam: 642-812 (BCMSN) Building Cisco Multilayer Switching Networks. Repeatable = 3 times (GC)

CNET-185  Optimizing Converged Networks
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Prerequisite: CNET-155A/B and CNET-156A/B; or CCNA certification
Advisory: CS-157 or CNET-157
Accepted For Credit: CSU
This is the last of four courses of the advanced study of Cisco Networking Academy. This course is designed to provide students with classroom and laboratory experience optimizing converged networks that will prepare them for the Cisco Certified Networking Professional (CCNP) exam: 642-845 Cisco Optimizing Converged Cisco Networks. Instruction includes troubleshooting methodology, network documentation, and debug. Repeatable = 3 times (GC)

CNET-195A1  Work Experience Education – Vocational
75.00 hrs lab
Units: 1.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

CNET-195A2  Work Experience Education – Vocational
150.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

CNET-195A3  Work Experience Education – Vocational
225.00 hrs lab
Units: 3.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

CNET-195A4  Work Experience Education – Vocational
300.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)
**COMPUTER SCIENCE**

Division: Science, Technology, and Engineering

**CS-101**  
Introduction to Computers and Information Technology  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: CNET-101  
Advisory: Eligible for ENGL-151B and ENGL-163; concurrent enrollment in CS-101A  
Accepted For Credit: CSU & UC  
This course is a general introduction to the area of computers and information technology and is designed for all students. This survey course will examine a broad overview of topics including software, hardware, the networking of computer systems, and information technology and surveys of programming languages. The student will explore the implications of this technology with regard to today's information society. (GC)

**CS-101A**  
Computer Applications I  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Cross-referenced Course: CAOT-101A  
Advisory: CAOT-101  
Accepted For Credit: CSU  
This course is the first in a three part series covering topics which include how to use Word documents, spreadsheets, database management programs, presentation graphics, and how to effectively use personal information manager programs. Students will also learn how to integrate program components. Formerly CS-101L. Repeatable = 1 time (GC)

**CS-102**  
Introduction to Computer Programming Using C++  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: MATH-152 or MATH-153  
Advisory: CS-101 or CNET-101  
Accepted For Credit: CSU & UC  
This course is an introduction to computer programming. Its primary objective is to teach problem solving using the C++ programming language. Emphasis will be placed on structured procedural programming with an introduction to object-oriented programming. This course is designed primarily for computer science and related transfer majors. (GC)

**CS-104A**  
Introduction to .NET Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: MATH-152 or MATH-153; CS-101 or CNET-101  
Accepted For Credit: CSU & UC  
This course covers the skills necessary to create structured Windows Applications. The class uses C# for design and development. Topics covered will include language syntax, event-driven programming, structured programming, most of the standard tools, and user interface strategies. This course is intended for a general audience with no programming experience. (GC)

**CS-104B**  
Advanced .NET Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-104A  
Accepted For Credit: CSU & UC  
This is an advanced course for .NET application design and development. Three major areas covered are Graphical User Interface for Windows applications; ADO.NET and SQL for access to databases; and XML and ASP.NET for Web forms and services. The .NET Framework will be used in class for program development. (GC)

**CS-104D**  
Web Services for .NET  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-104A and CS-122  
Accepted For Credit: CSU  
This course is designed to provide students with the knowledge and skills required to develop Extensible Markup Language (XML) Web Services. The course focuses on using Microsoft Visual Studio .NET and Microsoft ASP.NET to enable students to build, deploy, locate, and consume Web services. Repeatable = 2 times (GC)

**CS-113**  
Discrete Mathematics for Computers  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: MATH-163  
Prerequisite: MATH-188  
Advisory: MATH-101A and MATH-101B  
Accepted For Credit: CSU & UC  
This course is designed for majors in mathematics and computer science. It is the first course for students in discrete mathematics. The main goal of this course is to teach students to think abstractly. This requires that students learn to use logically valid different methods of proof including mathematical induction. Topics include logic, proofs, sets, relations, recurrence relations, graphs, trees, and combinatorics. Applications include Boolean Algebra, logic circuits, O-Notation, and Automata. (GC)

**CS-116**  
Object-Oriented Programming Using C++  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CS-102  
Accepted For Credit: CSU & UC  
This intermediate-level programming course is intended for those students who already have completed an introductory programming course. It presents a comprehensive study of the C++ programming language and its role in the realm of object-oriented programming. The C++ language supports input/output streams, class constructs, inheritance, polymorphism, function and operator overloading, function and class templates, and exception handling. (GC)

**CS-118**  
Introduction to Assembly Language Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CS-102  
Accepted For Credit: CSU & UC  
This course is an introduction to Assembly Language for Intel-based computers. Topics include numbering systems, architecture, native machine instructions, memory addressing, subroutines, interrupt handling, file I/O, and interaction between assembly language programs, the operating system, and other languages. (GR)

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Ohlone is ranked as the fifth best community college in California! Ohlone’s transfer rate of 58% ranks it in the top five of California community colleges.

Source: associatedcontent.com
CS-119  Computer Architecture  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-102, CS-113, CS-118  
Accepted For Credit: CSU  
This course will present the logical design of digital computers. The following topics will be covered: Boolean algebra, combinational and sequential circuits, computer arithmetic, memories, integrated circuits, control processors, input/output. No electronic experience is needed. (GR)

CS-122  C#.NET Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-101  
Accepted For Credit: CSU  
This course is an introduction to C#.NET Programming. Data types, methods, classes, control structures, loops, arrays, inheritance, exception handling, database connectivity, GUI controls, and Microsoft.NET architecture will be covered in this class. The primary objective is to teach the student how to develop C#.NET programs using Windows. Students will design forms, a shopping cart application, and Web automation by using HTML, XML, and C#.NET programming languages. Debugging will also be covered in class. (GC)

CS-124  Programming With Data Structures  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CS-102  
Advisory: Completion of, or concurrent enrollment in, CS-113  
Accepted For Credit: CSU & UC  
This course involves the study and implementation of data structure programming techniques. The emphasis is on the data structures of stacks, queues, lists, trees and graphs; the use of recursion; and the application of these tools primarily in searching and sorting. Students will implement these concepts by writing numerous programs in an object-oriented language such as C++. (GC)

CS-125  Introduction to Programming Using Java  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: MATH-152  
Advisory: CS-101 or CNET-101  
Accepted For Credit: CSU & UC  
This course is an introduction to computer programming. Its primary objective is to teach the fundamentals of programming using the Java programming language. Emphasis will be placed on basic Java programming concepts and skills. This course is designed primarily for computer science and related transfer majors. Repeatable = 2 times (GC)

CS-131  Computing Concepts in Biotechnology  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: BIOT-131  
Accepted For Credit: CSU  
This course introduces the basic computing concepts, the most commonly used computer algorithms, and programming languages in biotechnology. (GC)

CS-133  Introduction to SAS Programming  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: BIOT-133  
Accepted For Credit: CSU  
The SAS system has become the international standard for data management, manipulation, storage, retrieval, and statistical analysis. This course offers an introduction to the SAS software by using core elements of the SAS system programming language and procedures. (GR)

CS-133A  Data Analysis Using SAS  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: BIOT-133A  
Prerequisite: CS-133 or BIOT-133  
Accepted For Credit: CSU  
This course focuses on the following key areas: statistical inference, analysis of variance, multiple regression, categorical data analysis, and logistic regression. (GC)

CS-137  Introduction to SQL  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: CNET-137  
Advisory: CS-101A  
Accepted For Credit: CSU  
This course covers the concepts of relational databases and powerful SQL. Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. Demonstrations and hands-on practice reinforce the fundamental concepts. (GC)

CS-141B  SAS Graphing and ODS  
27.00 hrs lecture, 27.00 hrs lab  
Units: 2.00  
Cross-referenced Course: BIOT-141B  
Advisory: CS-133 or BIOT-133  
Accepted For Credit: CSU  
This course introduces SAS/GRAPH and ODS. Learn how to design, construct, and display customized graphs quickly and efficiently. Learn how to create a data set from the results of most SAS procedures and build custom reports. Repeatable = 1 time (GC)

CS-143  Advanced SAS Programming  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: BIOT-143  
Advisory: BIOT-133/CS-133 or some experience in SAS programming  
Accepted For Credit: CSU  
This course provides students with a basic understanding of macro programming and SQL procedure in SAS software. SQL and macro programming can provide more flexibility and power in data management and data analysis. (GR)

CS-145  PHP Programming with MySQL  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: CNET-145  
Accepted For Credit: CSU  
This is a programming class teaching the student how to access a relational database (MySQL) and generate web pages using PHP. The student does not need prior programming experience but general computer knowledge is recommended. (GC)

CS-146  Introduction to UNIX/Linux  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Cross-referenced Course: CNET-146  
Advisory: CNET-150  
Accepted For Credit: CSU  
This lecture-lab course introduces functions of and features of UNIX/Linux operating system, including origin and evolution, hardware and software, graphical user interface, files and file system structure, system services, processes, background processing, scheduling, file security, editors, file sharing, and redirection and piping. Students are introduced to networking and internetworking, internet, shell programming, and a variety of UNIX/Linux tools commonly used for software development and system administration in a UNIX/Linux environment. Repeatable = 3 times (GC)
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture</th>
<th>Lab</th>
<th>Advisory</th>
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<th>Acceptance For Credit</th>
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<td>Data Communications</td>
<td>3.00</td>
<td>36.00</td>
<td>54.00</td>
<td>CS-102, or permission by portfolio</td>
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<td>CS-102</td>
<td>ART-160A, BA-160A, GA-160A</td>
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<td>ART-160A, BA-160A, GA-160B</td>
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<td>CS-162</td>
<td>XHTML</td>
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<td>36.00</td>
<td>108.00</td>
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<td>MM-162</td>
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<td>CS-169A</td>
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<td>18.00</td>
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<tr>
<td>CS-169B</td>
<td>Intermediate Digital Photography</td>
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<td>ART-139A, CS/GA-169A, or approval by portfolio review</td>
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**CS-170**  
Java Programming  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-102 and CS-125  
Accepted For Credit: CSU & UC  
This intermediate-level programming course is intended for those students who already have completed an introductory programming course. It presents a comprehensive study of the object-oriented programming in Java. Fundamentals of encapsulation, inheritance, polymorphism, abstraction, method overloading and overriding, exception handling, GUI components, event handling, multimedia programming, and input/output streams are introduced. Repeatable = 2 times (GC)

**CS-172**  
Servlets and JSP  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-170  
This is an Internet programming and application course using Java technology, including Servlet, JSP, Session tracking, JavaBeans, and JDBC. Repeatable = 2 times (GC)

**CS-173**  
Java EE and EJB  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-170  
This course is an introduction to Java EE and EJB (Enterprise Java Beans). Students will design and develop the business applications and Web Services using Java EE and EJB. Repeatable = 2 times (GC)

**CS-175**  
From JavaScript to AJAX  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: CS-101  
Accepted For Credit: CSU  
This is an introductory to intermediate course for the scripting language JavaScript, the glue between Web interactivity tools. The topics span from basic programming concepts to specific JavaScript syntax and methods used to manipulate information and code, which allow web forms validation, rewriting of HTML pages on the fly, and access to XML and other server information using AJAX. (GC)

**CS-176**  
Introduction to PERL CGI Programming Development  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
This course is an introduction to CGI (Common Gateway Interface) programming with PERL. The primary objective is to teach how to create interactive Web pages using CGI. Students will learn the fundamental concepts of CGI, the basics of design and integration with HTML, and sufficient PERL to be able to create CGI programs. (GC)

**CS-177**  
E-Commerce  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
This course is designed to provide complete coverage of key business and technology elements of electronic commerce with emphasis on both the theory and practices of conducting business over the Internet. Students will integrate business and technology elements by developing and administering their own E-Commerce Web site. Repeatable = 1 time (GC)

**CS-178**  
XML  
54.00 hrs lecture  
Units: 3.00  
Advisory: CS-170  
Accepted For Credit: CSU  
This course is designed to teach students the technologies of XML (the eXtensible Mark-up Language), XSL (eXtensible Style Language), and DSSSL (Document Style Symantics and Specification Language). Repeatable = 1 time (GC)

**CS-195A1**  
Work Experience Education – Vocational  
75.00 hrs lab  
Units: 1.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

**CS-195A2**  
Work Experience Education – Vocational  
150.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

**CS-195A3**  
Work Experience Education – Vocational  
225.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

**CS-195A4**  
Work Experience Education – Vocational  
300.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

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**CONSUMER FAMILY SCIENCES**

Division: Health Sciences and Environmental Studies

**CFS-104A**  
Current Issues in Child Nutrition  
36.00 hrs lecture  
Units: 2.00  
Advisory: Eligible for ENGL-151B  
The role and requirements of nutrients for children are reviewed. Current issues regarding nutrition and feeding of children are discussed. Legislation regarding feeding of children is updated. The course is recommended for school food service, child care, WIC personnel, and parents. (GC)
CFS-106  Food: The Chemicals We Eat
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
This course introduces non-majors to the basics of chemicals present in food. A series of topics are discussed, which will integrate and elucidate the components of food by making use of the chemical, physical, and biological sciences. Beginning with the introduction to food as a chemical, students will learn about different kinds of foods and their properties. Students will also learn about food additives, coloring and flavoring agents. The Government's role in assuring food quality will be examined. At the end of the course students will be able to recognize the information that is on a food label and be able to apply this knowledge to their well-being. (GR)

CFS-108  Nutrition and Fitness
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
This course reviews in depth the relationship between the nutrients and muscular performance. Food sources and meal plans for optimum performance, fitness, weight maintenance, weight loss, and weight gain are explored. The need for supplements and popular diets are evaluated. (GC)

CFS-109  Nutrition
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This course studies the concepts and applications of nutrition in health and disease. Essential nutrients and their functions, food sources, requirements, digestion, absorption, and metabolism are covered. This course is recommended for pre-nursing and other health majors. (GC)

CFS-195A1 Work Experience Education – Vocational
75.00 hrs lab
Units: 1.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

CFS-195A2 Work Experience Education – Vocational
150.00 hrs lab
Units: 2.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

CFS-195A3 Work Experience Education – Vocational
225.00 hrs lab
Units: 3.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

CFS-195A4 Work Experience Education – Vocational
300.00 hrs lab
Units: 4.00
Accepted For Credit: CSU
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

DEAF-116A  ESL Vocabulary I in American Sign Language
36.00 hrs lecture
Units: 2.00
Advisory: Basic ability to communicate in ASL
This course is the first of two basic vocabulary courses designed for students who are new to the United States or who wish to build their English vocabulary skills. Students will strengthen their understanding of words through thematic reading and interactive exercises; by studying word parts, synonyms, and antonyms; and by analyzing their meanings in various written contexts. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-116B  ESL Vocabulary II in American Sign Language
36.00 hrs lecture
Units: 2.00
Advisory: Basic ability to communicate in ASL
This course is the second in two basic vocabulary courses designed for students who are new to the United States or who wish to build their English vocabulary skills. Students will strengthen their understanding of words through thematic reading and interactive exercises, by studying word parts, synonyms and antonyms, and by analyzing their meanings in various written contexts. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-118A  ESL Writing I in American Sign Language
54.00 hrs lecture
Units: 3.00
Advisory: Basic ability to communicate in ASL
This course is the first course of a two-semester ESL writing program for Deaf students. This course introduces basic writing skills, emphasizing the structure of English sentences and paragraph development. It is designed for students whose native language is not English. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-118B  ESL Writing II in American Sign Language
54.00 hrs lecture
Units: 3.00
Advisory: Basic ability to communicate in ASL
This course is the second course of a two-semester ESL writing program for Deaf students. This course further develops basic writing skills, emphasizing the structure of English sentences and paragraph and essay development. Designed for students whose native language is not English. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)
DEAF-119A  ESL Reading I in American Sign Language  
54.00 hrs lecture  
Units: 3.00  
Advisory: Basic ability to communicate in ASL  
This course is the first course of a two-semester ESL reading program for Deaf students. This course is designed for students who are new to the United States or who wish to begin a basic study of English reading at a beginning ESL level, with an emphasis on fluency and vocabulary development. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-119B  ESL Reading II in American Sign Language  
54.00 hrs lecture  
Units: 3.00  
Advisory: Basic ability to communicate in ASL  
This course is the second course of a two-semester ESL reading program for Deaf students. This course is designed for students who are new to the United States or who wish to continue a basic study of English reading at a beginning ESL level, with an emphasis on fluency and vocabulary development. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-120A  Basic Grammar I  
54.00 hrs lecture  
Units: 3.00  
Advisory: Fluency in ASL  
This course is designed for students who wish to develop their English grammar skills through exposure and practice. Students will have opportunities to learn basic grammar rules through interactive exercises and studying sentence parts and writing sentences. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-120B  Basic Grammar II  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-120A  
This course is designed for students who wish to develop their English grammar skills through exposure and practice. Students will have opportunities to learn basic grammar rules through interactive exercises and studying sentence parts. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-121A  Intermediate Grammar I  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-120A and DEAF-120B  
This course is designed for Deaf/Hard of Hearing students who wish to further develop their grammar skills through practice and application. Students will have opportunities to learn grammar rules through interactive exercises and studying sentence parts and writing sentences. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-121B  Intermediate Grammar II  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-121A  
This course is designed for Deaf/Hard of Hearing students who wish to continue to develop their grammar skills through practice and application. They will have opportunities to apply grammar rules through interactive exercises, studying sentence parts, and writing sentences. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-130A  Literacy I  
54.00 hrs lecture  
Units: 3.00  
Advisory: Fluency in ASL  
The focus of this course is on development of practical reading and practical language skills in applied settings. This course is the first of a two-semester English Literacy program for Deaf and Hard Of Hearing students. The emphasis is on increased practical reading skills and vocabulary. Taught in ASL. Not applicable to associate degree. Repeatable = 5 times (GC)

DEAF-130B  Literacy II  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-130A; fluency in ASL  
The focus of this course is on development of practical reading and practical language skills in applied settings. This course is the second semester of a two-semester English Literacy program for Deaf and Hard of Hearing students. The course is taught in ASL only. The emphasis is on increased practical reading skills and vocabulary. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GC)

DEAF-131A  Intermediate Literacy I  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-130A/B; DEAF-120A/B  
This course is the first of two courses designed for Deaf/Hard of Hearing students who wish to increase vocabulary and expand knowledge about various topics related to the world in which we live. The course will also promote practice in reading. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-131B  Intermediate Literacy II  
54.00 hrs lecture  
Units: 3.00  
Advisory: DEAF-130A/B; DEAF-120A/B  
This course is the second of two courses designed for Deaf and Hard of Hearing students who wish to further increase vocabulary and knowledge about various topics related to real world. The course will also promote practice in reading. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-140A  Lifeskills Mathematics I  
36.00 hrs lecture  
Units: 2.00  
Advisory: ASL Fluency  
This course provides students with real world application of basic math skills in the areas of money management, banking, and consumerism. This is the first part of a two-semester course. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)
DEAF-140B  Lifeskills Mathematics II
36.00 hrs lecture
Units: 2.00
Advisory: DEAF-140A; fluency in ASL
This course provides students with real world application of basic math skills in the areas of money management, banking, consumerism, and employment. This is the second part of a two-semester course. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-141A  Workplace Communication I
54.00 hrs lecture
Units: 3.00
Advisory: ASL fluency
This course focuses on workplace communication skills for employment preparation. Emphasis will be on both written and signed communication with hearing co-workers and supervisors. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-141B  Workplace Communication II
54.00 hrs lecture
Units: 3.00
Advisory: DEAF-141A; ASL fluency
This course is taught in continuation of workplace communication skills for employment preparation. Emphasis will be on both written and signed communication with hearing co-workers and supervisors. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-143  Def Vocational Awareness
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: DEAF-145A and/or DEAF-145B
This course provides deaf students opportunities to visit and tour a variety of Bay Area businesses. Students will learn to contact employers by using an interpreter on the phone to set up the field trips. While touring the work site students will apply practical informational interviewing skills using an interpreter for communication purposes to gather facts about work requirements, job duties, application procedures, and employment protocol. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-145B  Job Seeking Strategies for Deaf Students
54.00 hrs lecture
Units: 3.00
Advisory: ASL Fluency
This course allows student job seekers to evaluate their own interests, skills, and aptitudes and relate them to employment. Students will develop strategies and practice specific skills necessary for a successful job hunt to result in gainful employment. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-146  Work Experience Seminar
36.00 hrs lecture
Units: 2.00
Advisory: DEAF-195; ASL fluency
Designed for students to get training while having their work experience class at Ohlone College. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-147A  Citizenship: Introduction
54.00 hrs lecture
Units: 3.00
This course is the first of four courses designed for Deaf/Hard of Hearing students who need to develop pre-employment readiness. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-147B  Citizenship: One’s Role
54.00 hrs lecture
Units: 3.00
Prerequisite: DEAF-147A
This course is the second of four courses in the Direct Employment Program designed for Deaf/Hard of Hearing students who need to develop next level of skills in job readiness. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-148  Community Service
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
This course will focus on the concept and experience of community service and provide hands-on-community-based learning experience. The course will introduce the definition and importance of community service and volunteerism, and their importance in career development, and will address safe practices in new environments and using tools. Performance expectations will be applied to community service participation. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-157A  English Composition Techniques
54.00 hrs lecture
Units: 3.00
Advisory: Fluency in ASL
This course is the first of two courses with strong emphasis on refinement of English composition skills as applied through paragraph and essay development. Students are exposed to a variety of well-written essays and guided through an analysis of structure, content, and style. Taught in ASL only. Not applicable to associate degree. Repeatable = 2 times (GR)

DEAF-157B  Principles of Composition
54.00 hrs lecture
Units: 3.00
Advisory: Fluency in ASL
This course is the second of two courses with a strong emphasis on refinement of English composition skills as applied through paragraph and essay development. Students are exposed to a variety of well-written essays and guided through an analysis of structure, content, and style. Taught in ASL only. Not applicable to associate degree. Repeatable = 2 times (GR)

DEAF-159A  Reading Strategies
54.00 hrs lecture
Units: 3.00
Prerequisite: Fluency in ASL
This course is the first of two courses with an emphasis on introduction to reading and study techniques. Students learn various skills to analyze a variety of readings including essays and news articles. This course is designed to prepare students for more extensive courses in reading. Taught in ASL only. Not applicable to associate degree. Repeatable = 2 times (GR)

DEAF-159B  Reading Techniques
54.00 hrs lecture
Units: 3.00
Advisory: Fluency in ASL
This course is the second of two courses with an emphasis on introduction to reading and study techniques. Students learn various skills to analyze a variety of readings including essays and news articles. This course is designed to prepare students for more extensive courses in reading. Taught in ASL only. Not applicable to associate degree. Repeatable = 2 times (GR)
DEAF-160A  Personal and Social Awareness I
36.00 hrs lecture
Units: 2.00
Advisory: ASL Fluency
This is a practical course designed to explore issues relevant to Deaf college students. Group activities will focus on personal challenge and growth. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-160B  Personal and Social Awareness II
36.00 hrs lecture
Units: 2.00
Prerequisite: DEAF-160A
This is a continuation of DEAF-160A and is designed to explore issues relevant to Deaf college students. Group activities will focus on personal challenge and growth. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-161  Introduction to the Deaf Community
54.00 hrs lecture
Units: 3.00
Advisory: ASL Fluency
This is a basic course on the culture of American Deaf people. Cultural norms of Deaf people are examined and current issues within the Deaf community are discussed. Community resources are presented. Taught in ASL. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-165  Study Techniques: MS Word, MS Excel, and MS Access
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Prerequisite: Fluency in ASL
Introductory use of Microsoft Word, Microsoft Excel, and Microsoft Access to prepare students for college-level work. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-166  Study Techniques: Introduction to Multimedia Photoshop, MS Powerpoint, and MS Publisher
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Advisory: Fluency in ASL, DEAF-165
Introductory course in the use of PhotoShop, Microsoft PowerPoint, MS Publisher, and use of digital camera to prepare students for college-level work. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GR)

DEAF-175A  IUPP Grammar I
54.00 hrs lecture
Units: 3.00
This course is designed for students who already have an intermediate to advanced knowledge of English sentence structure but who need further refinement of grammar and other language skills. Taught in ASL. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-175B  IUPP Grammar II
54.00 hrs lecture
Units: 3.00
This course is designed for students who have successfully completed DEAF-175A and wish to continue to strengthen and refine their grammar skills. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GC)

DEAF-176A  Academic Vocabulary I
36.00 hrs lecture
Units: 2.00
Advisory: ASL fluency
This course is the first of two courses designed for students who wish to improve their vocabulary through exposure to words found in academic coursework. Students will strengthen their understanding of words through thematic reading and interactive exercises, by studying word parts, synonyms, and analogies, and by analyzing their meanings in various written contexts. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-176B  Academic Vocabulary II
36.00 hrs lecture
Units: 2.00
Advisory: ASL fluency
This course is the second of two courses designed for students who wish to improve their vocabulary through exposure to words found in academic coursework. Students will strengthen their understanding of words through thematic reading and interactive exercises, by studying word parts, synonyms and antonyms, and analogies, and by analyzing their meanings in various written contexts. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-188A  Intensive University Preparation – Academic Writing I
72.00 hrs lecture
Units: 4.00
Advisory: ASL fluency
This course is the first course in a three-semester program in writing with an emphasis on composition, critical reading skills, and the development of natural English expression. This course reviews the fundamentals of sentence types and mechanics and focuses on reading critically and writing well-developed and well-organized paragraphs and essays. The course is designed to prepare students who are fluent in ASL for college-level English composition and academic course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-188B  Intensive University Preparation – Academic Writing II
72.00 hrs lecture
Units: 4.00
Advisory: ASL fluency
This course is the second course in a three-semester program in writing with an emphasis on composition, critical reading skills, and the development of natural English expression. This course reviews the fundamentals of paragraph development and focuses on reading critically and writing well-developed and well-organized paragraphs and essays. The course is designed to prepare students who are fluent in ASL for college-level English composition and academic course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-188C  Intensive University Preparation – Academic Writing III
72.00 hrs lecture
Units: 4.00
Prerequisite: ASL fluency
This course is the third course in a three-semester program in writing with an emphasis on composition, critical reading skills, and the development of natural English expression. This course reviews the fundamentals of essay development and focuses on reading critically and writing summaries and well-developed, well-organized essays. The course is designed to prepare students who are fluent in ASL for college-level English composition and academic course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GC)
DEAF-189A  Intensive University Preparation –
Academic Reading I  
54.00 hrs lecture  
Units: 3.00  
Advisory: ASL fluency  
This course is the first course of a three-semester academic reading program. This course provides an introduction to reading and study techniques. Students learn to analyze, annotate, and summarize a variety of readings including essays, news articles, and textbook chapters. The course is designed to prepare students for college-level course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-189B  Intensive University Preparation –
Academic Reading II  
54.00 hrs lecture  
Units: 3.00  
Advisory: ASL fluency  
DEAF-189B is the second course of a three-semester reading program. This course focuses on improvement of reading and study skills. Students analyze, annotate, and summarize readings of greater length and complexity. The course is designed to prepare students for college-level course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-189C  Intensive University Preparation –
Academic Reading III  
54.00 hrs lecture  
Units: 3.00  
Advisory: ASL fluency  
DEAF-189C is the third course of a three-semester reading program. This course focuses on strengthening of reading and research skills. Students analyze, annotate, and summarize readings of increasing length and complexity. The course is designed to prepare students for college-level course work. Taught in ASL only. Not applicable to associate degree. Repeatable = 3 times (GR)

DEAF-191  Human Potential Seminar  
36.00 hrs lecture  
Units: 2.00  
Prerequisite: Limited to Deaf students only  
This practical course is specifically designed to meet the personal growth needs of Deaf students finding their place as Deaf adults in a hearing society. Emphasis will be on issues encountered in everyday life. Group and individual activities will encourage self-exploration and awareness, values clarification, conscious choice, decision making, and interpersonal communication. Taught in ASL only. Not applicable to associate degree. Repeatable = 5 times (GC)

DEAF-195A2  Work Experience Education – Vocational  
150.00 hrs lab  
Units: 2.00  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. Repeatable = 5 times (GC)

DEAF-195A3  Work Experience Education – Vocational  
225.00 hrs lab  
Units: 3.00  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) Repeatable = 5 times (GC)

DEAF-195A4  Work Experience Education – Vocational  
300.00 hrs lab  
Units: 4.00  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) Repeatable = 5 times (GC)

DEAF-311  Introduction to American Deaf Culture  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B, ENGL-163; ASL fluency  
Accepted For Credit: CSU; Gallaudet  
Introduction to the social, cultural, and sociolinguistic characteristics of Deaf people. Taught in ASL. Repeatable = 5 times (GC)

DEAF-312  Linguistics of ASL  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B, ENGL-163; ASL fluency  
Accepted For Credit: CSU  
This is an introduction to the language of American Deaf people. Grammar, morphology, phonology, and semantics of American Sign Language are covered. Taught in ASL. Repeatable = 5 times (GR)

DEAF-330  Educating the Deaf  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B, ENGL-163; ASL fluency  
Accepted For Credit: CSU  
This course has been designed to provide the student with a general orientation to Deaf/Deaf education. The course provides an overview of the historical, philosophical, and social aspects of Deaf education. The course analyzes the impact of Deaf education on hearing families. In addition, it provides an orientation to problems, issues, research, legislation, and current trends in the field of education of the Deaf. Repeatable = 5 times (GR)

DEAF-331  Counseling the Deaf  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B, ENGL-163; ASL fluency  
Accepted For Credit: CSU  
This course is designed to provide students with skills that are needed to work with deaf students in a school setting. Taught in ASL. Repeatable = 5 times (GR)

DEAF-332  Development of the Deaf Child  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B, ENGL-163; ASL fluency  
Accepted For Credit: CSU  
This course provides students with an overview of child development theories as they relate to the Deaf experience. Taught in ASL. Repeatable = 5 times (GR)

DEAF-343  Field Work in Deaf Education  
162.00 hrs lab  
Units: 3.00  
Prerequisite: Enrollment in the Deaf Education Certification Program  
Advisory: Eligible for ENGL-151B, ENGL-163  
This course is designed to provide Deaf Education students with hands-on experience in a deaf school setting. A weekly seminar is included for group discussion of practicum experience. Taught in ASL. Repeatable = 5 times (GR)

DEAF-365  Supervised Tutoring  
180.00 hrs lab  
Units: 0.00  
Prerequisite: Instructor or counselor referral  
This course provides students with individualized tutoring. It assists students to develop a learning methodology in a subject. It includes diagnosis and consultation with tutorial coordinator and supervised tutoring by part-time instructional aides and/or student tutors. Not applicable to associate degree. Repeatable = 5 times (NG)
EARLY CHILDHOOD STUDIES
Division: Humanities, Social Sciences, and Mathematics

**ECS-195A**  Work Experience Education – Vocational
- **Units:** 1.00
- **Accepted For Credit:** CSU
- **Description:** Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**ECS-195A**  Work Experience Education – Vocational
- **Units:** 2.00
- **Accepted For Credit:** CSU
- **Description:** Work experience education for students employed in jobs directly related to a major. Units are based on hours worked. (GC)

**ECS-195A**  Work Experience Education – Vocational
- **Units:** 3.00
- **Accepted For Credit:** CSU
- **Description:** Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**ECS-195A**  Work Experience Education – Vocational
- **Units:** 4.00
- **Accepted For Credit:** CSU
- **Description:** Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

**ECS-300**  Principles and Practices of Teaching Young Children
- **Units:** 3.00
- **Accepted For Credit:** CSU
- **Description:** An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics and professional identity. (GR)

**ECS-301**  Childhood Growth and Development
- **Units:** 3.00
- **Accepted For Credit:** CSU & UC
- **Description:** This course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences, and analyze characteristics of development at various stages. (GR)

**ECS-302**  Introduction to Curriculum
- **Units:** 4.00
- **Accepted For Credit:** CSU
- **Description:** This course is an overview of the application of principles of human growth and development to individual issues in early childhood educational programs including appropriate play, aesthetic and learning experiences including program content, use of materials and equipment, planning and guidance of assessment and documentation. (GR)

**ECS-303**  Child, Family, and Community
- **Units:** 3.00
- **Accepted For Credit:** CSU
- **Description:** An examination of the developing child in a societal context focusing on the interrelationship of family, school and community and emphasizing historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families. (GR)

**ECS-304**  Observation and Assessment of Children
- **Units:** 4.00
- **Accepted For Credit:** CSU
- **Description:** This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. (GR)

**ECS-305**  Health Safety and Nutrition
- **Units:** 3.00
- **Accepted For Credit:** CSU
- **Description:** Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children. (GR)

**ECS-306**  Guidance and Discipline of Young Children
- **Units:** 3.00
- **Accepted For Credit:** CSU
- **Description:** The principles of positive guidance and discipline based on contemporary research and child development will be discussed in this course. Application of the principles of effective communication, understanding child development and behavior, appropriate limits and rules, structuring problem solving, and consequences will be discussed. This course is appropriate for teachers and parents. (GC)
ECS-307A4 Practicum – Field Experience
36.00 hrs lecture, 108.00 hrs lab
Units: 4.00
Advisory: Eligible for ENGL-101A; ECS-300
This course continues direct experience working with and observing young children. Students will plan, implement, and evaluate program components and activities for young children. Students must complete this course in the Ohlone Child Care Lab. Students will perform the competencies of a Head Teacher/Site Director. (GR)

ECS-310 Music and Movement Curriculum for Young Children
54.00 hrs lecture
Units: 3.00
Advisory: ECS-300, ECS-301, ECS-302, ENGL-101A
This course provides a survey of music, materials, and movement activities for young children (2-10 years). Students learn effective techniques for using songs, rhythm, instruments, creative dance, and games. The use of a variety of musical media and props will be demonstrated. Repeatable = 1 time (GR)

ECS-308 Administration of Programs for Young Children
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A; ECS-300, ECS-301, ECS-302
This course covers principles in organization and management of preschools and childcare centers. Subject matter includes program planning, organization, budgeting, personnel, records, relationships with community resources, regulatory agencies, and working with parents. The legal requirements for operating programs for young children in California provide a framework for course work. (GR)

ECS-311 Art for the Young Child
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A; ECS-300, ECS 301, ECS-302
This course includes practice in using age-appropriate methods with commonly available creative art media for children of various developmental stages, infancy through eight years old. Students learn to make, collect, and use various materials to develop an understanding of how art expression and skills change as children mature. Evaluation and appreciation of art activities as opportunities for self-expression and sensory stimulation will be explored. Repeatable = 1 time (GR)

ECS-307B4 Intermediate Practicum – Field Work
36.00 hrs lecture, 108.00 hrs lab
Units: 4.00
Prerequisite: ECS-307A3, ECS307A4, or ECS-307A5
This course continues direct experience working with and observing young children. Students will plan, implement, and evaluate program components and activities for young children. Students must complete this course in the Ohlone Child Lab. Students will perform the competencies of a Head Teacher/Site Director. (GR)

ECS-312 The Development of Literacy in Early Childhood Education
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
This course examines how children gain oral language and listening skills leading to the development of writing and reading. It will include curriculum development for an emergent literacy environment. (GR)

ECS-313 Science and Math Curriculum for Young Children
54.00 hrs lecture
Units: 3.00
Advisory: ECS-300, ECS-301, ECS-302
This course provides guidelines for preparing math and science curriculum for the young child. Math and science interrelationships will be explored, as well as gender differences, current research, and the use of hands-on approach. Repeatable = 1 time (GR)

ECS-309 Teaching in a Diverse Society
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A
This course offers direct experience working with and observing young children. Students will plan, implement, and evaluate program components and activities for young children. Students must complete this course in the Ohlone Child Care Lab. Students will perform the competencies of a Head Teacher/Site Director. (GR)

ECS-314 Literature for the Young Child
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-101A and ECS-312
This course provides an in-depth experience with literature for children ages 0-8. The course introduces students to the development of reading in young children, their interests, diversity and reading skill levels of young children. Content to be covered includes the historical development of children’s literature, effective techniques used to introduce literature, books, poetry, other reading media, story telling and reading to children. Students will learn how to extend literature into other curriculum areas. (GR)
Children with Special Needs in Programs for Young Children

- **ECS-316**
  - 54.00 hrs lecture
  - Units: 3.00
  - Advisory: Eligible for ENGL-101A
  - Accepted For Credit: CSU
  - The course focuses on recognizing and distinguishing the variety of special needs exhibited by children 0 through 12 years. Factors affecting and contributing to the causes and needs of these children will be explored, including genetic, environmental, physical, cognitive, and social. (GR)

Infant and Toddler Development and Care

- **ECS-317**
  - 36.00 hrs lecture, 54.00 hrs lab
  - Units: 3.00
  - Prerequisite: ECS-301
  - Advisory: Eligible for ENGL-151B and ENGL-163
  - Accepted For Credit: CSU
  - Students will study infant and toddlers’ physical growth, social adjustment, and the psychological and social roots from which children develop. Students practice planning environments and equipment selection, health, safety, caregiving routines, and communication skills in group settings, working with infants and toddlers. (GR)

Introduction to Family Child Care Homes

- **ECS-320**
  - 18.00 hrs lecture
  - Units: 1.00
  - This course will cover the operation of child care in a home setting. Topics will include home setup, business practices and policies, program planning, parent relations, and communications. California licensing regulations will be covered. Not applicable to associate degree. (CR)

Supervision in Early Childhood Programs

- **ECS-321**
  - 54.00 hrs lecture
  - Units: 3.00
  - Prerequisite: ECS-300, ECS-301, and ECS-303
  - Advisory: Eligible for ENGL-101A
  - Accepted For Credit: CSU
  - This course covers group dynamics, supervision of staff and parents, development of motivation and morale, leadership skills, and functions of personnel. It includes interviews, interpersonal and group conflict resolution, staff evaluations, and working with parents and boards. It is designed to provide knowledge and methods for those working in supervisory capacities in early childhood programs. (GR)

Mentoring and Supervision in Early Childhood Programs

- **ECS-322**
  - 36.00 hrs lecture
  - Units: 2.00
  - Advisory: ECS-302, ECS-308; eligible for ENGL-101A
  - Accepted For Credit: CSU
  - This course is a study of the methods and principles of supervising student teachers, assistant teachers, parents, and volunteers in early childhood education programs. Emphasis is on the role of master teachers who function as both supervisors and mentors while addressing the needs of children, parents, and other staff. (GR)

Advanced Training in Infant-Toddler Care

- **ECS-323**
  - 54.00 hrs lecture
  - Units: 3.00
  - Prerequisite: ECS-300, ECS-301, ECS-317
  - Accepted For Credit: CSU
  - Advanced ECS students will study infant/toddler growth and development in all domains. Specific consideration will be given to planning environments, recognizing and diagnosing delays, relationships with parents, effect of nurturing, and the group setting on very young children. Repeatable = 1 time (GR)

Parenting

- **ECS-324**
  - 54.00 hrs lecture
  - Units: 3.00
  - Advisory: Eligible for ENGL-151B
  - Accepted For Credit: CSU
  - This introductory course is an exploration of the role and relationships involved in parenting. It explores the historical context and changes in perceptions and responsibilities assigned to parents in American society. Topics include history of parenting, parenting styles, beliefs and values, skills and methods, relationships, and basic child development. Repeatable = 1 time (GR)

Workshop Series for Parents and Teachers

- **ECS-325A**
  - 9.00 hrs lecture
  - Units: 0.50
  - This course is a workshop for parents and teachers covering specific topics in the field of Early Childhood Studies. The theme and content varies and is determined by the Early Childhood Studies instructors. Not applicable to associate degree. Repeatable = 3 times or 4 units (CR)

School Age Child Development

- **ECS-327**
  - 54.00 hrs lecture
  - Units: 3.00
  - Advisory: ECS-301, ECS-302, ENGL-101A
  - Accepted For Credit: CSU
  - This course is the study of the developing child during the school-age years. It focuses on the developmental characteristics; influences on development; individual differences; physical, social-emotional, cognitive, and creative development. It examines the role of the teacher in programs designed for the school-age child. (GR)

Curriculum for the School Age Child

- **ECS-328**
  - 54.00 hrs lecture
  - Units: 3.00
  - Prerequisite: Completion of ECS-301 and ECS-302
  - Advisory: Eligibility for ENGL-101A
  - Accepted For Credit: CSU
  - This course studies the fundamentals of planning, implementing, and evaluating curriculum for programs serving school-age children and their families. The emphasis is on developing and providing age appropriate activities, environment, and relationships in the context of an integrated and active curriculum. (GR)

Early Childhood Director's Seminar

- **ECS-329**
  - 36.00 hrs lecture
  - Units: 2.00
  - Prerequisite: ECS Certificate of Achievement
  - Advisory: Current employment as Director/Administrator
  - Accepted For Credit: CSU
  - This course provides on-going professional support, information, and resources for students who are currently administering Early Childhood Programs. A combination of dialogue, professional guest speakers, exposure to community resources, network building activities, current information on research, trends, and issues of the field will contribute to the student’s competence, performance, and effectiveness in his/her supervisor role. Repeatable = 3 times (GC)

Second Helping for Family Childcare Providers

- **ECS-330**
  - 36.00 hrs lecture
  - Units: 2.00
  - Prerequisite: ECS-320, 18 months experience in a licensed program
  - This is the second course for Family Child Care Providers. It covers the role of the provider, the task of managing, and active curriculum. (GR)
**EDUCATION**

Division: Humanities, Social Sciences, and Mathematics

**EDUC-101 Exploring Education**
- 54.00 hrs lecture, 54.00 hrs lab
- Units: 4.00
- Advisory: Eligible for ENGL-151B
- Accepted For Credit: CSU & UC

This course will introduce students to the field of teaching. The class will include reports and discussions related to direct observations of pre-school, elementary, secondary, higher education, and non-school educational settings. Changing issues in education and their implications for future teaching practices and theories will be examined. (GR)

**EDUC-105 Math and Science Future Teacher Seminar**
- 54.00 hrs lecture
- Units: 3.00
- Advisory: MATH-151 and ENGL-101A
- Accepted For Credit: CSU & UC

This course is designed to provide students pursuing a career in secondary school math or science teaching with theory and hands-on experience working with children in math and science skills at a local elementary or secondary school. This course includes work with mathematics and science material, assessment, methodology, and the school environment. The course includes 50 hours of on-site field experience, as a service learning component, in a local elementary or secondary school. (GC)

**EDUC-191A Tutor Training Part I**
- 9.00 hrs lecture
- Units: 0.50
- Corequisite: Employment as a tutor at Ohlone College for at least 25 hours

This course covers effective methods for tutoring. The do's and don'ts of tutoring, study skills, and questioning techniques are a few of the topics covered. Students enrolling in this course must be concurrently employed as a tutor at Ohlone College. CRLA has approved this course for certification, and students who receive CRLA certification are qualified to tutor at any of the over 500 colleges in the U.S. and Canada that have CRLA programs. Repeatable = 1 time (CR)

**EDUC-191B Tutor Training Part II**
- 9.00 hrs lecture
- Units: 0.50
- Corequisite: Employment as a tutor at Ohlone College for at least 25 hours

This course continues on from Part I with additional effective methods of tutoring. Learning styles, structuring the learning experience, handling challenging situations, and being inventive are among the topics covered. Students enrolling in this course must be concurrently employed as a tutor at Ohlone College. Leads to CRLA certification. Repeatable = 1 time (CR)

**ENGINEERING**

Division: Science, Technology, and Engineering

**ENGI-101 Introduction to Engineering**
- 36.00 hrs lecture, 54.00 hrs lab
- Units: 3.00
- Advisory: Eligible for ENGL-151B and ENGL-163
- Accepted For Credit: CSU & UC

This course explores the field of engineering and its different branches. It provides hands-on design projects including experimentation, team work, ethics, and the application of basic scientific principles to practical situations. (GC)

**ENGI-114 How Technology Works**
- 54.00 hrs lecture, 54.00 hrs lab
- Units: 4.00
- Cross-referenced Course: CNET-114
- Accepted For Credit: CSU

This course is intended for students of all disciplines who are interested in how everyday things work. It is an introduction to some of the fundamental science concepts underpinning high technology, emphasizing everyday devices and practical experience, for the development of scientific and computer literacy. Students will experiment with technology to discover principles of science. Concepts such as force, work, energy, power, liquids and gasses, heat transfer, electricity, magnetism, electronics, light, materials science, and time are explored through experimentation and observation. Students will experience through class demonstrations and hands-on laboratories the concepts presented by the instructor. Phenomena such as how computers convert data, how iPods transmit sound, how electronic thermometers measure temperature, how solar heating panels capture heat, and how GPSs use microwaves will be explored. Field trips to local tech industry displays are required. (GC)

**ENGI-115 Engineering Graphics and Design**
- 54.00 hrs lecture, 54.00 hrs lab
- Units: 4.00
- Accepted For Credit: CSU

This course covers the principles of graphic expression by means of technical sketching, and computer aided drafting. (GR)

**ENGI-120 Engineering Mechanics – Statics**
- 54.00 hrs lecture
- Units: 3.00
- Prerequisite: PHYS-140 and MATH-101B
- Accepted For Credit: CSU & UC

This course is a study of force systems and equilibrium in two and three dimensional structures, distributed forces, friction, and virtual work. (GR)

**ENGI-130 Electric Circuit Analysis**
- 54.00 hrs lecture, 54.00 hrs lab
- Units: 4.00
- Prerequisite: MATH-101B and PHYS-141
- Advisory: Eligible for ENGL-151B and ENGL-163
- Accepted For Credit: CSU & UC

This course is a study of DC and AC linear circuits and transient and steady state analysis. Experimental techniques, instrumentation, and circuit simulation will be covered in the lab. (GR)
ENGI-135  Introduction to Robotics and Automated Systems  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: CNET-115  
Accepted For Credit: CSU  
Students who take this class will understand how scientific innovation can affect their lives either directly or indirectly. The class will teach students the principles of scientific methodology as it is applied to solving problems. The application of this scientific method will be used to navigate an abundance of technical information – to obtain the information, to understand the information, and to determine how to apply it. This course describes the functional hardware and software components of Automated Systems. The student will experience how scientific principles are applied by building and programming robots. The emphasis is for students to learn science by actually doing science. Repeatable = 3 times (GC)

ENGI-140  Materials Engineering  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: CHEM-101A and PHYS-140  
Accepted For Credit: CSU & UC  
This course covers atomic and crystal structures; imperfections; diffusion and relation between microstructure; the properties of engineering materials such as metals, polymers, ceramics and composites; phase equilibrium and transformations; mechanical, electrical, thermal, magnetic and optical properties; corrosion; and material degradation. (GR)

ENGI-195A1  Work Experience Education – Vocational  
75.00 hrs lab  
Units: 1.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

ENGI-195A2  Work Experience Education – Vocational  
150.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

ENGI-195A3  Work Experience Education – Vocational  
225.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

ENGI-195A4  Work Experience Education – Vocational  
300.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC)

3.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: Knowledge of basic algebra and trigonometry relationships  
Accepted For Credit: CSU  
This class is an introduction to electricity and electronic devices. Students will learn the basic theory of electricity and apply that knowledge to build, test, and troubleshoot electrical circuits. In the lab, students will learn to operate the test and measurement instrumentation necessary to support construction of electrical circuits. (GR)

ETEC-107  Properties of Materials  
4.50 hrs lecture, 13.50 hrs lab  
Units: 0.50  
Advisory: MATH-151  
Accepted For Credit: CSU  
This course surveys materials, properties, and applications for technicians. Topics will include a brief introduction to the properties of metals, polymers, ceramics, and composites. (GR)

ENGL-101A  Reading and Written Composition  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: ENGL-151B and ENGL-163, or appropriate skill level demonstrated through the placement test process  
Accepted For Credit: CSU & UC  
This course focuses on reading and writing of expository and argumentative works and introduction to research skills and documentation to develop students’ ability to think critically and advocate ideas forcefully and accurately. Students will increase practical fluency by developing sentence, paragraph, thesis, and essay writing skills. (GR)

ENGL-101B  Reading and Composition (Introduction to Literature)  
72.00 hrs lecture  
Units: 4.00  
Prerequisite: ENGL-101A  
Accepted For Credit: CSU & UC  
Students will read and evaluate literature in a critical, logical way. The emphasis will be upon critical analysis of literary works (novels, short story, poetry, and drama) and upon the students’ development of an appreciation of literature. (GR)

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**Did you know?**

Nearly 2/3 of community college students who transfer to UC complete a bachelor’s degree within three years of entering UC – a rate comparable to “native” UC students (those students who were eligible and entered as freshmen).

Source: Community College League of California
ENGL-101C Critical Thinking and Composition
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ENGL-101A  
Accepted For Credit: CSU & UC  
Students will learn critical thinking skills and use them to read and evaluate essays in a precise, logical way. The emphasis will be upon critical analysis and upon the students’ development of effective, written arguments. (GR)

ENGL-104 The Short Story
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
Students read and discuss a wide variety of short stories. The short story is seen as a reflection of historical and contemporary concerns, as a happy entertainment alternative to television, and as a traditional and experimental literary form. (GC)

ENGL-106 Censorship and Literature
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: JOUR-106  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This literature course focuses on the issues of censorship and obscenity. Selected works will be closely examined in an attempt to encourage students to formulate their own standards in this controversial area. (GC)

ENGL-107 Literature and Film
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
“Lights, camera, action!” Hundreds of works of literature have been made into films, with varying degrees of success. If you’ve ever been disappointed (or thrilled) by the film version of a book you’ve read, you know that film adaptations range from “two thumbs way up” to “had me gagging on my popcorn.” This course will examine the relationships between literature and film, comparing and contrasting the two media. (GC)

ENGL-108 Writing Short Fiction
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ENGL-101A  
Accepted For Credit: CSU & UC  
This course will review the fundamentals of fiction writing, provide an in-depth study of intermediate short fiction writing techniques, and offer exercises designed to stimulate creativity. (GR)

ENGL-109 The Graphic Novel
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course presents graphic novels and related literature genres by and about characters from various ethnic, cultural, socio-economic, historical, and geo-political backgrounds. These graphic novels will be analyzed with a focus on language, art, design, ideology, substance, and content in order to explore the genre of the graphic novel as an art form and literature form as well as to recognize the undercurrent of themes running through this form of literature. Studying the artists’ works and examining the historical, social, psychological, and cultural forces shaping the literary and artistic form of the graphic novel will allow students to become aware of this genre of literature as a unique contribution to the study of literature and art. (GC)

ENGL-111A Beginning Creative Writing
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course includes experimentation with creative principles such as fiction, non-fiction, drama, and poetry, and a critical analysis of the student’s work. (GC)

ENGL-111B Intermediate Creative Writing
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ENGL-111A  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course provides students the opportunity to experiment with creative principles such as fiction, non-fiction, drama, and poetry, and a critical analysis of student’s work. (GC)

ENGL-112 Modern Fiction
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
The themes of love and sexuality, family conflict, coming of age, and the individual in society are explored in the fiction of modern writers such as Toni Morrison, Amy Tan, John Updike, Franz Kafka, and others. (GC)

ENGL-113 Poetry
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course examines traditional and contemporary poetry and poets. It includes discussion of sound, symbol, and spirit in poems by major poets like Shakespeare, Sylvia Plath, Wordsworth, Frost, Emily Dickinson, and others. (GR)

ENGL-114 World Mythology
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a study of significant myths and legends with emphasis on Greek/Roman, Nordic (Norse), and another Indo-European mythological system. Students also study other mythological systems of various cultures through independent research. Focus is on literature. (GC)
ENGL-115 Women in Literature  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: WS-115  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
Students will read, discuss, and write about short stories, novels, poetry, drama, and essays of British and American women writers past and present. (GC)

ENGL-117 Science Fiction and Fantasy  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
A sampling of science fiction and fantasy from traditional space voyages, sword and sorcery to more sophisticated, modern forms are studied in this course. (GC)

ENGL-118 Introduction to Shakespeare  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course introduces the students to the Elizabethan era, to drama as a literary form, and to the plays and poems of William Shakespeare. (GC)

ENGL-119 The Gothic Novel  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course examines selected gothic novels in English and American Literature in order to analyze and discuss their importance in the development of fiction. Course focus is on the gothic impulse in nineteenth century literature. Classics like Frankenstein, Dracula, Jane Eyre, and Dr. Jekyll and Mr. Hyde will be studied in connection with the preoccupations of the Romantic and Victorian eras. Vintage films will be shown. (GC)

ENGL-120A Survey of American Literature: Beginning to 1865  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course focuses on the literary productions of America from its beginning to 1865. Students will read and discuss American oral traditions, short stories, poetry, drama, and novels and will become familiar with great American writers. (GC)

ENGL-120B Survey of American Literature: 1865 to Present  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course focuses on American literature from 1865 to the present: Transcendentalism, Modernism, and Postmodernism. Students will read and discuss classic American short stories, poetry, drama, and novels and will become familiar with great American writers. (GR)

ENGL-121 The Mystery: Unlocking Its Secrets  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
The course explores the mystery genre by introducing students to various works of past and contemporary British and American authors and by introducing students to the various sub-genres such as cozies, amateurs, police procedurals, forensics, and private investigators. (GC)

ENGL-122 Environmental Literature  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a survey of environmental writing reflecting the changing relationship between humans and their environment through time. Readings will cover a range of eras and philosophies, including Native American creation tales, narratives from the Age of Conquest, poetry and fiction from the Romantic Era, early environmental essays from the 19th and 20th centuries, and current environmental writing. Students will read a variety of literary and non-fiction texts from Thoreau, Muir, Leopold, Stegner, Carson, Abbey, Pollan, and others. (GC)

ENGL-125A English Literature: From the Middle Ages to the Restoration/18th Century  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
The course encompasses several revolutions in style and sensibility that have shaped English literature from Beowulf through the Middle Ages, the 16th century, the 17th century, and the Restoration/Early 18th century. (GR)

ENGL-125B English Literature: From Romanticism to Modernism  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course encompasses several revolutions in style and sensibility that have shaped English literature from the Romantic nature poets like Wordsworth, Keats, and Shelley to Modernist writers like James Joyce, Virginia Woolf, and T.S. Eliot. (GR)

ENGL-127 Autobiography: Writing Journals and Memoirs  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU  
This is an autobiography course for those who wish to write about their personal and family experiences in journals and memoirs. The course encourages students to remember, consider, and write about their own and their family’s past and present, to learn basic research techniques, to organize their material, and to write effectively. Students will also discuss extracts from published autobiographical works. (GC)

ENGL-129 Psychology and Literature  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course focuses on a variety of major psychological issues as they emerge from the close study of character, conflict, and motivation in literature. Common themes will include attachment and identity, childhood, family conflict, sexuality and romantic love, stages of adulthood, and awareness of death. Major psychological theorists such as Freud, Piaget, and Erikson will be presented and their theories applied to the texts being analyzed and discussed. (GC)
ENGL-130 American Stories: Multicultural Autobiography and Memoir  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course explores the lives of multicultural Americans, such as Native Americans, African Americans, Asian Americans, and Latinos, as told through autobiography or memoir. (GC)

ENGL-131 Hip Hop/Slam Poetry  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU  
This is a creative writing course in which students write and perform hip hop and slam poetry that expresses their thoughts about the world. (GC)

ENGL-141 Advanced Novel and Short Story Writing  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU  
This course is to complete the ENGL-111A and ENGL-111B series for creative writing. Participants will be focusing on finishing their novels, memoirs, and/or updating their short stories, so that they may be published. (GC)

ENGL-151A Fundamentals of Composition  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: ESL-184RW or appropriate skill level demonstrated through the placement test process  
Advisory: Concurrent enrollment in ENGL-162 or ENGL-175  
This course focuses on fundamentals of English grammar, punctuation, and acceptable usage as applied to writing clear sentences, paragraphs, and informal essays. Not applicable to associate degree. Not applicable to associate degree. (GR)

ENGL-151B Fundamentals of Composition  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: ENGL-151A or appropriate skill level demonstrated through the placement test process  
Advisory: Concurrent enrollment in ENGL-163 or ENGL-175  
This course reviews fundamentals of English grammar, punctuation, and sentence structure and focuses on reading critically and writing well-developed and well-organized paragraphs and essays (descriptive, expository, and argumentative). Not applicable to associate degree. Not applicable to associate degree. (GR)

ENGL-156 Introduction to Report and Technical Writing  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-151B, BA-116, or equivalent writing experience  
Accepted For Credit: CSU  
This course focuses on the basics of technical writing and covers how to write effective workplace documents such as memos, procedures, and reports, as well as formal proposals. (GC)

ENGL-162 Developmental Reading  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Advisory: ESL-184RW or Accuplacer assessment. Concurrent enrollment in ENGL-151A encouraged to enhance combined reading and writing skills  
English 162 is an introduction to college reading and study techniques. Students learn to analyze, annotate, and summarize a variety of college readings, including essays, textbooks chapters, news articles, and stories. Emphasis is on analytical reading: recognizing main ideas, discerning underlying patterns of thought, making inferences, and drawing conclusions. Not applicable to associate degree. Repeatable = 1 time (GR)

ENGL-163 Techniques of College Reading  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Prerequisite: ENGL-162 or score between 71.5 and 87.5 on the reading portion of Accuplacer Assessment  
Advisory: Concurrent enrollment in ENGL-151B encouraged  
ENGL-163 is the most advanced in the series of reading and study skills courses. In this course students will develop college level skills in vocabulary, comprehension, critical reading and thinking, study strategies, reading rate, and written response to reading. Not applicable to associate degree. Repeatable = 1 time (GR)

ENGL-167 Critical and Analytical Reading  
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ENGL-163, or eligible for ENGL-101A  
Accepted For Credit: CSU  
A college-level reading course with emphasis on the development of critical analytical thinking. Focus is placed on the student’s ability to understand inferential reading passages, including the ability to understand the author’s point of view and to engage in textual analysis. In addition, the student should develop the ability to successfully critique college-level reading material by analyzing a variety of prose structures. (GC)

ENGL-172 Vocabulary Improvement  
54.00 hrs lab  
Units: 1.00  
This course is designed for students of all levels of achievement who wish to improve their vocabulary through an individualized program. Students will be asked to work 54 hours in the lab at their convenience. Materials are assigned after pretesting. Not applicable to associate degree. Repeatable = 3 times (GC)

ENGL-173 Improvement of Learning Techniques  
54.00 hrs lab  
Units: 1.00  
ENGL-173 is for students who wish to improve learning skills through individualized practice of effective reading, studying, and listening. Students will be asked to work 54 hours or complete three assigned programs in the lab at their convenience. Materials are assigned after pretesting. Not applicable to associate degree. Repeatable = 3 times (GC)

ENGL-174 Spelling Improvement  
54.00 hrs lab  
Units: 1.00  
ENGL-174 is for students who wish to improve spelling skills through individualized practice. Students will be asked to work 54 hours or complete three assigned programs in the lab at their convenience. Materials are assigned after pretesting. Not applicable to associate degree. Repeatable = 3 times (GC)
ENGL-175  Reading and Comprehension Improvement
54.00 hrs lab
Units: 1.00
ENGL-175 is for students who wish to improve reading comprehension through individualized work on specific weaknesses. Students will be asked to work 54 hours or complete three assigned programs in the lab at their convenience. Materials are assigned after pretesting. Not applicable to associate degree. Repeatable = 3 times (GC)

ENGL-176  Rapid Reading
54.00 hrs lab
Units: 1.00
Advisory: Ninth grade reading comprehension level
This course is for the student who has at least a ninth grade level of comprehension and who wishes to increase reading rate while maintaining or improving the level of comprehension. Students will be asked to complete three programs equivalent to 54 hours at their convenience. Materials are assigned after pretesting. Not applicable to associate degree. Repeatable = 3 times (GC)

ENGL-365  Supervised Tutoring
90.00 hrs lab
Units: 0.00
Prerequisite: Instructor or counselor referral
This course provides students with individualized tutoring. It assists students to develop a learning methodology in a subject. It includes diagnosis and consultation with tutorial coordinator and supervised tutoring by part-time instructional aides and/or student tutors. Not applicable to associate degree. Repeatable = 3 times (GC)


ENGLISH AS A SECOND LANGUAGE

Division: Humanities, Social Sciences, and Mathematics

ESL-121  English Idioms
36.00 hrs lecture
Units: 2.00
Prerequisite: Placement into ESL-181 or higher
This course helps students learn idiomatic expressions that are commonly used by native speakers in English conversation. Students will listen to and read dialogues containing English idioms and practice producing them in informal dialogues of their own. Not applicable to associate degree. (GC)

ESL-122  News and Current Events for ESL Students
36.00 hrs lecture
Units: 2.00
Prerequisite: ESL-181RW, or placement into ESL-182RW or higher
Read and discuss news stories and current events. Simplified and standard newspapers will be used. Some writing will be required. Not applicable to associate degree. (GC)

ESL-123  English Verb Tenses
54.00 hrs lecture
Units: 3.00
Prerequisite: ESL-181RW, or placement into a higher level of ESL or English
This course is designed for non-native speakers of English who want a review of the English verb tense system. It emphasizes accurate use of verb tenses in writing, but it will include oral practice as well. Not applicable to associate degree. (GC)

ESL-125  Using the Internet for ESL Practice
36.00 hrs lecture
Units: 2.00
This course is designed for non-native speakers of English to learn how to make good use of the rich internet resources available for learning and practicing English. Students will learn about a variety of ESL Web sites, and will learn the computer skills necessary to most effectively interact with those resources. Not applicable to associate degree. (GC)

ESL-150  English Pronunciation I
54.00 hrs lecture
Units: 3.00
Advisory: Concurrent enrollment in ESL-181LS
Practice in basic pronunciation including the International Phonetic Alphabet (IPA), the recognition and production of the corresponding IPA sounds, stress in words, basic rhythm and intonation patterns, and the development of fluency in basic communicative contexts. Not applicable to associate degree. (GC)

ESL-151  English Pronunciation II
54.00 hrs lecture
Units: 3.00
Prerequisite: ESL-150
Practice in intermediate pronunciation skills including a review of the International Phonetic Alphabet (IPA); the recognition and production of the corresponding IPA sounds; stress in sentences, rhythm, and intonation patterns; and the development of fluency in a greater variety of communicative contexts. Not applicable to associate degree. (GC)

ESL-181LS  Listening and Speaking, Level I
90.00 hrs lecture
Units: 5.00
Prerequisite: Appropriate score on the ESL Placement Test
This course is designed to develop communication skills in American English. It is open to students whose native language is not English. There is practice in the skills of listening and speaking with an emphasis on fluency and vocabulary development. Not applicable to associate degree. (GC)
Announcement of Courses

Environmental Studies

Division: Health Sciences and Environmental Studies

ENVS-101 Natural Resource Management
- 54.00 hrs lecture
- Units: 3.00
- Accepted For Credit: CSU & UC
- Quantitative analysis of earth’s natural resources and the role of human populations in their use, sustainable development, and exploitation. Topics typically include the status and trends of resources such as topsoil degradation, agriculture, water, energy, and wildlife. Emphasis is on problem solving and computational methods applied to resource management problems. (GC)

ENVS-102 Environmental Law and Regulations
- 54.00 hrs lecture
- Units: 3.00
- Accepted For Credit: CSU & UC
- This course explores fundamental legal and policy issues in environmental law. Legislative, judicial, and administrative controls over public and private actions impacting on the environment are discussed. The course examines the statutory, administrative, and judicial decisions relating to the environment and the government actors, agencies, and citizens making these decisions. (GC)

ENVS-103 The Environment and Human Health
- 54.00 hrs lecture
- Units: 3.00
- Accepted For Credit: CSU & UC
- A by-product of human population growth is the modification of habitat and the surrounding environment. This course examines the close link between human health and environmental health, particularly focusing on how pollution of the air, water, and land, as well as contamination of food and ecosystems, impacts the human body. (GR)
ENVS-104  Solar Photovoltaic Design and Installation  
36.00 hrs lecture, 54.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Introduction of solar photovoltaic system requirements, design and configurations, installation techniques, and their application in residential and commercial construction. Entry-level Certification Exam from NABCEP is an option. (GR)

ENVS-105  Energy: Development and Sustainability  
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU & UC  
This course is an exploration of the conversion and use of energy, on the nature of energy and energy systems, how different cultures use and view energy, and the use of energy in contemporary societies. This course will explain the origin and dimensions of the global energy problem and identify how energy issues and policies affect environmental quality, economic growth, and global politics. The course will focus on how energy conservation, energy efficiency, and renewable energy sources can be incorporated to create a sustainable society. (GR)

ENVS-106  Wind Energy: Design and Development  
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
This course explores the role of wind as an energy source, as well as its social, economic, and political implications on the global energy supply. Surveys in historical wind energy application will be conducted, its reliability assessed, and environmental implications analyzed. Also studied will be wind energy applications and basic operating principles. The status of the industry’s future and renewable energy as a whole will be analyzed. (GR)

ENVS-107  Introduction to Sustainable Agriculture  
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
This course examines how changes in the way we eat and farm impact the environment and how traditional and evolving methods of farming can reduce our environmental impact and feed our populations sustainably. (GC)

ENVS-108  Human Ecology  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: BIOL-108  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
Human Ecology is an interdisciplinary, general education course that identifies problems created by man’s modification of his environment, presents solutions to these problems, and offers appropriate alternatives. (GC)

ENVS-109  Urbanization: Towards Green Communities  
54.00 hrs lecture  
Units: 3.00  
Accepted For Credit: CSU  
This course presents the sociological, economical, and sustainable perspective in the investigation and understanding of urban phenomena. Included are a wide range of topics that tap the spectrum of urban growth and development in both the developed and developing world. (GC)

ENVS-111  Advanced PV Design and Installation  
54.00 hrs lecture  
Units: 3.00  
Prerequisite: ENVS-104  
Accepted For Credit: CSU  
The field of solar power is ever expanding with new technology, equipment, and installation techniques. This course will further enhance and add to the knowledge gained by students who have taken ENVS-104, Introduction to Solar PV Design and Installation. (GR)

ENVS-122  Environmental GIS  
18.00 hrs lecture, 54.00 hrs lab  
Units: 2.00  
Cross-referenced Course: GEOG-122  
Prerequisite: GEOG-121  
Advisory: CS-101A  
Accepted For Credit: CSU  
GIS skills applied to issues such as air pollution, urban design, environmental health, and water resources. (GC)

ENVS-142  Environmental Biology  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Cross-referenced Course: BIOL-142  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This lecture and lab course is an introduction to the biological sciences focusing on diversity; organismal interactions with their environment and with other organisms (ecology), the effects humans have had on biological diversity and ecosystems, and efforts to protect species and their habitats (conservation). (GC)

FRENCH  
Division: Humanities, Social Sciences, and Mathematics

FREN-101A  Elementary French  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course is an introduction to the reading, writing, speaking, and understanding of French. (GR)

FREN-101B  Elementary French  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: FREN-101A or two years of high school French  
Accepted For Credit: CSU & UC  
This course is a continuation of FREN-101A. It covers the fundamentals of French grammar in addition to reading, writing, and speaking the language. (GR)

FREN-102A  Intermediate French  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: FREN-101B or three years of high school French  
Accepted For Credit: CSU & UC  
This course is a review of grammar, oral, and written composition and a study of French culture. (GR)
FREN-102B  Intermediate French  
90.00 hrs lecture, 18.00 hrs lab  
Units: 5.00  
Prerequisite: FREN-102A  
Accepted For Credit: CSU & UC  
This course is a continuation of FREN-102A that covers advanced grammar, oral and written composition, and the study of the French civilization. (GR)  

FREN-110  Beginning Conversational French  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
This course focuses on the essentials of French conversation leading to the development of the ability to use the French language in everyday situations. Extensive oral practice of the language is combined with fundamental grammatical concepts. Repeatable = 3 times (GC)  

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GENDER AND WOMEN’S STUDIES  
Division: Humanities, Social Sciences, and Mathematics  

WS-101  Introduction to Gender and Women’s Studies  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course will focus on the questions and concepts in gender and women’s studies, the development of U.S. feminism and feminist theory, and the globalization of feminism and feminist concerns. Central to this course will be the ways in which place, race, ethnicity, sexuality, gender orientation, class, and age shape women’s experiences and the various socio-political meanings of gender. We will also examine the ways in which women have resisted inequality and effected social and political change. This course will be interdisciplinary in its approach, meaning that we will read feminist essays from a wide range of disciplines, including cultural studies, economics, history, philosophy, political theory, psychology, and sociology. In addition, we will conduct several small sociological experiments and observations, and we will watch excerpts of videos and films. (GC)  

WS-108  Gender Communication  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: SPCH-108  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
Examine the influence of gender and culture on communication in personal relationships, organizations, mass media and society. (GR)  

WS-115  Women in Literature  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: ENGL-115  
Advisory: Eligibility for ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a study of selected fiction, poetry, drama, and essays of British and American women writers past and present. (GC)  

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GEOGRAPHY  
Division: Science, Technology, and Engineering  

GEOG-101  Physical Geography  
54.00 hrs lecture, 54.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU & UC  
This course will focus on the interaction between humans and their physical environment emphasizing the natural features of weather and climate, land forms, soil, vegetation, earthquakes, and volcanism, water quality and environmental management, and pollution. (GC)  

GEOG-102  Cultural Geography  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course will focus on the study of the origin, spread, and regional differences of human cultures as they relate to the use of the earth and how they relate to their physical environments. The course explores how different people use and/or abuse or otherwise change the earth as the home of humanity. (GC)
GEOG-104  The World's Nations
54.00 hrs lecture
Units: 3.00
Advisory: Eligible for ENGL-151B and ENGL-163
Accepted For Credit: CSU & UC
This course deals with the regional variations of the world and its effects of human modification of the physical environment. The factors contributing to landscape change such as settlement patterns, transportation networks, types of agriculture, and the various types of land tenure systems; current world problems and environmental issues are also discussed. (GC)

GEOG-105  California Geography
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
This course investigates California's physical, cultural, and economic environments; analyzing changes resulting from both natural and human interaction. The emphasis is on cultural diversity, human alteration of the landscape, and contemporary problems resulting from accelerated competition for natural, financial, and human resources. (GC)

GEOG-120  Introduction to Global Positioning Systems (GPS)
9.00 hrs lecture, 2700 hrs lab
Units: 1.00
Advisory: GEOG-101
This course focuses primarily on the science and application of Global Positioning System (GPS) technology. Students receive hands-on experience with space-based radio navigation systems. The course will examine current and future GPS applications, explore basic navigation, illustrate map coordinate systems, and then integrate this knowledge with the GPS satellite navigation system. (GR)

GEOG-121  Introduction to Geographic Information Systems (GIS)
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: GEOG-101
Accepted For Credit: CSU
The objective of this introductory course is to gain basic knowledge of GIS concepts, techniques, and applications. The emphasis of this course is to provide hands-on instruction on the functionality of GIS as an effective tool for modeling and analyzing complex spatial relationships. (GR)

GEOG-122  Environmental GIS
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Cross-referenced Course: ENVS-122
Prerequisite: GEOG-121
Accepted For Credit: CSU
This course will apply skills and techniques that were introduced in Geography 121, Introduction to GIS. The course will allow the student to gain a further understanding of GIS concepts, technical issues, and applications using ArcView GIS to study various environmental themes. (GR)

GEOG-123  GIS Projects
54.00 hrs lab
Units: 1.00
Prerequisite: GEOG-121
Accepted For Credit: CSU
This course enables students to manage GIS projects using knowledge acquired in GEOG-121 and GEOG-122. Repeatable = 1 time (GC)
GEOL-104 The Changing Earth: Historical Geology
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU & UC
The study of the origin and evolution of Earth and life through time. Geological history and global change as revealed by plate tectonics, rocks, fossils, and evidence for climatic change, both ancient and recent. The development of continents, especially North America, ocean basins, and mountains. One Saturday field trip required. (GR)

GA-109A Beginning Graphic Design I
(Letter Forms and Typography)
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-109A
Advisory: ART-104A
Accepted For Credit: CSU
This course is an introduction to graphic design. It will cover the fundamentals of letter form design with traditional and contemporary alphabets. Studio practice will emphasize the relationships between image and message. Repeatable = 3 times (GC)

GA-110A Advanced Graphic Design I
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-110A
Prerequisite: GA-109A or ART-109A
Accepted For Credit: CSU
This is an advanced class. The emphasis is on students’ problem-solving ability. It includes comprehensive projects in applied graphics and three-dimensional design. There is instruction in techniques for package design, product visualization, execution of 3-D design prototypes for presentation and photography. Repeatable = 3 times (GC)

GA-109B Beginning Graphic Design II
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-109B
Prerequisite: GA-109A or ART-109A
Accepted For Credit: CSU
This course is an introduction to the pictorial image and written word as basic components in a format for communications. The studio practice develops the student’s ability to formulate and communicate a concept into graphic form for both presentation and production. Repeatable = 3 times (GC)

GA-110B Advanced Graphic Design II
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-110B
Prerequisite: GA-110A or ART-110A
Accepted For Credit: CSU
This course gives advanced attention to design solution and presentation. The class deals with the development of a single all-inclusive graphic design project. The emphasis is on effective client relationship from concept development through assignment completion. Repeatable = 3 times (GC)

GA-138A Beginning Photoshop
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-138A
Accepted For Credit: CSU & UC
This course is for photographers with limited experience or new to Adobe Photoshop. Students learn how to work with a digital “darkroom” using images supplied by the instructor for this purpose. Topics include: image file management and organization, file formats, resolution, basic image editing, selective image editing, scanning, preparing images for web-based application, and an introduction to the basics of photography. Repeatable = 3 times (GC)

GA-138B Intermediate Photoshop
27.00 hrs lecture, 81.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-138B
Prerequisite: GA-138A or ART-138A
Accepted For Credit: CSU
This course is an introduction to microcomputers and to the creation of computer-generated graphics. This course examines the variety of software/hardware tools and techniques available for the production of computer-made imagery. The emphasis is on hard-copy production using printers, plotters, and other reproduction methods. This course also covers design principles, business graphics, and elementary programming principles. Repeatable = 3 times (GC)

GA-160A Computer Graphics I
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Cross-referenced Course: ART-160A, BA-160A, CS-160A
Accepted For Credit: CSU & UC
This course is an overview of computer graphics on desktop computers for graphic designers, artists, typographers, and for business applications. This course will cover hardware and software including: laser printers, ink jet printers, scanners, tablets, and bit-mapped and vector-based graphics programs. The course also covers design principles and business graphics. The course emphasis is on the creation of a portfolio of computer graphics drawings. Repeatable = 3 times (GC)
GA-161B  Digital Graphics II  
18.00 hrs lecture, 54.00 hrs lab  
Units: 2.00  
Cross-referenced Course: ART-161B, CAOT-161B  
Prerequisite: GA-161A, ART-161A, or CAOT-161A  
Accepted For Credit: CSU  
This course is a continuation of GA-161A. The emphasis in this course is on developing intermediate and advanced skills needed to set up and operate a digital graphics work station and publish on the Web. Students complete projects of their choice using complex graphics software, scanners, tablets, and printers. The course emphasis is on the continued development of a portfolio of computer images. Repeatable = 3 times (CR)

GA-163  Digital Arts Lab – Macintosh  
27.00 hrs lab  
Units: 0.50  
Cross-referenced Course: ART-163, ID-163  
This course is a lab component for all courses taught on the Macintosh and on drafting equipment in these areas: Art, Graphic Arts/Computer Graphics, Photography, and Interior Design. Students will produce digital graphic and drafting projects for art related classes. Repeatable = 3 times (GC)

GA-169A  Beginning Digital Photography  
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-139A  
Accepted For Credit: CSU & UC  
This course explores the photographer’s creative process from several directions. Students will undertake photographic projects designed to provide engagement with a variety of subject matter and ways of photographing. Look at photographic work in online and local galleries and museums, consider current issues having to do with photographic technologies, discuss their photographs with other students in an effort to improve their creative processes. Technical instruction will include camera functions, resizing and saving digital files, and minor image modification. For intense technical instruction, see ART-138A and ART-138B. Repeatable = 3 times (GC)

GA-169B  Intermediate Digital Photography  
18.00 hrs lecture, 108.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-139B  
Prerequisite: ART-139A or GA-169A  
Accepted For Credit: CSU  
This course continues an exploration of the photographer’s creative process from several directions. Students will undertake photographic projects designed to provide engagement with a variety of subject matter and ways of photographing; complete an extended photographic project of their choosing and receive guidance from the instructor and students; look at photographic work in online and local galleries and museums; consider current issues around photographic technologies; discuss their photographs with other students in an effort to improve their creative processes. Students will formalize their individual projects as books or online galleries. Technical instruction will include camera functions, resizing and saving digital files, and minor image modification. For intense technical instruction see ART-138A and ART-138B. Students should consider completing ART-138A prior to enrolling in this course, but it is not a requirement. Repeatable = 3 times (GC)

HLTH-101  Contemporary Health Issues  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course promotes personal, family, and community well-being and includes ways to obtain and maintain optimum wellness. (GC)

HLTH-120  Mind-Body Balance  
36.00 hrs lecture  
Units: 2.00  
This experiential course invites participants to integrate mind-body techniques into their life to promote relaxation, balance, and mindfulness. Mind-body techniques include meditation, breath work, biofeedback, imagery, reflective drawing, journaling, nutrition, time management, assertiveness, and exercise. This course focuses on the art of self-care. Registered Nurses and Licensed Vocational Nurses will receive thirty continuing education hours upon successful course completion. (GC)

HLTH-125  Stress Management  
36.00 hrs lecture  
Units: 2.00  
Advisory: Ability to read and write English at a college level is highly recommended  
Accepted For Credit: CSU  
This course is a theoretical and experiential approach for incorporating stress management into your daily life. Understand the stressors in your life, the physical and psychological implications of that stress, prevention strategies and stress reduction techniques. (GC)

HLTH-130  Acupressure Connection I  
18.00 hrs lecture  
Units: 1.00  
Cross-referenced Course: AH-130  
This course presents the fundamental concepts of acupressure. Students give acupressure treatments to self and others to relieve pain and promote relaxation. Additional holistic health practices are addressed including therapeutic touch, relaxation techniques, meditation, exercise, and nutrition. This course is open to anyone who is interested in living a healthier lifestyle and assisting others to do the same. Registered Nurses and Licensed Vocational Nurses will receive sixteen continuing education hours upon successful course completion. (CR)

HLTH-150  Women’s Health Issues  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: WS-150  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course is a study of the contemporary issues affecting women’s health at home and at work from biological, psychological, and sociological perspectives. Explore such topics as mental health, sexuality, parenting, nutrition, exercise, rape and battery, aging, occupational health, and cultural diversity, and the effects on women in American culture. (GC)
HLTH-160  Human Sexuality  54.00 hrs lecture  Units: 3.00  Accepted For Credit: CSU & UC  This course examines the physiological and psychological aspects of sexual health in our contemporary society. Understanding the interrelationship of attitude and behavior as it relates to sexual integrity. Emphasis will be on knowledge, attitudes and behavior that will contribute to a healthy individual. (GC)

HISTORY  Division: Humanities, Social Sciences, and Mathematics

HIST-104A  Western Civilization with a World Perspective Until 1600  54.00 hrs lecture  Units: 3.00  Advisory: Eligible for ENGL-101A  Accepted For Credit: CSU & UC  This course is a survey of the cultural, social, and political developments of civilization in the Mediterranean through the beginning of early modern history. This course takes an interdisciplinary approach to the study of Western Civilization before 1600 and includes a world perspective. (GC)

HIST-104B  Western Civilization with a World Perspective From 1600  54.00 hrs lecture  Units: 3.00  Advisory: Eligible for ENGL-101A  Accepted For Credit: CSU & UC  This course is a survey of the cultural, social and political developments in Western Civilization with a world perspective from the rise of the nation-state through contemporary times with a speculative look at the future. (GC)

HIST-105  History of California  54.00 hrs lecture  Units: 3.00  Advisory: ENGL-101A  Accepted For Credit: CSU & UC  This course covers the heritage and development of California from its beginnings to the present day with emphasis on the economic, social, ethnic, multicultural, and political forces which shaped the modern state. The Golden State’s phenomenal growth and multicultural changes are emphasized. (GC)

HIST-107  History of Film  54.00 hrs lecture  Units: 3.00  Cross-referenced Course: TD-107  Advisory: Eligible for ENGL-151B and ENGL-163  Accepted For Credit: CSU & UC  This course examines the impact of film on our lives and history. Students will review films, and discuss and analyze techniques used. (GR)

HIST-112  Chicano History  54.00 hrs lecture  Units: 3.00  Cross-referenced Course: CHS-102  Advisory: Eligible for ENGL-151B and ENGL-163  Accepted For Credit: CSU & UC  This course covers the development of Chicano history. Special emphasis will be placed upon the influence of Chicano history on contemporary institutions, particularly in the Southwest and California. (GC)

HIST-114A  African American History 1619-1877  54.00 hrs lecture  Units: 3.00  Advisory: ENGL-151B and/or ENGL-163  Accepted For Credit: CSU & UC  This course covers the history of African Americans from the early 17th century to 1877. Political, social, cultural, and economic experiences will be discussed. (GC)

HIST-114B  African American History 1877 to Present  54.00 hrs lecture  Units: 3.00  Advisory: ENGL-151B and/or ENGL-163  Accepted For Credit: CSU & UC  A history of African Americans from 1877 to present will be covered. Political, social, cultural, and economic experiences will be discussed. (GR)

HIST-115  Asian-American History  54.00 hrs lecture  Units: 3.00  Advisory: Eligible for ENGL-101A  Accepted For Credit: CSU & UC  This course is a review of Asian Pacific Americans in the social, political, economic and cultural development of the United States from Reconstruction to the present. Groups surveyed will include Korean, Filipino, Asian Indian, Pacific Islanders, South East Asian, Japanese, and Chinese. (GC)

HIST-117A  History of the United States  54.00 hrs lecture  Units: 3.00  Advisory: Eligible for ENGL-101A  Accepted For Credit: CSU & UC  This course surveys the history of the United States from pre-colonial times through colonial times and Reconstruction (1877). (GR)

HIST-117B  History of the United States  54.00 hrs lecture  Units: 3.00  Advisory: ENGL-101A  Accepted For Credit: CSU & UC  This course surveys the history of the United States from 1877 (the end of Reconstruction) to the present. (GC)

HIST-118  Contemporary U.S. History: 1945-  54.00 hrs lecture  Units: 3.00  Advisory: Eligible for ENGL-101A  Accepted For Credit: CSU & UC  This course surveys the post-World War II role of the United States in world affairs and explores the socio-political development of the nation from 1945 to the present. It will emphasize the growing cultural pluralism of twentieth century America. (GR)
HIST-119A  Bad Girls: Women in America Before 1890  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
Women before 1890 faced numerous hardships in their struggles for equality. This course traces women of different racial and ethnic backgrounds as they challenge social, economic, political, and gender norms in North America. The course explores how women have negotiated issues such as race, class, gender, work/labor, and sexuality. (GC)

HIST-119B  Bad Girls: Women in America From 1890  
54.00 hrs lecture  
Units: 3.00  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
Women in the United States after 1890 faced numerous hardships in their struggles for equality. This course traces women of different racial and ethnic backgrounds as they challenge social, economic, political, and gender norms in North America. The course explores how women have negotiated issues such as race, class, gender, work/labor, and sexuality. (GR)

HIST-141  A History of Early Rock and Roll: Music and Culture of the 1950's  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: IS-142, MUS-122  
Advisory: Eligible for ENGL-101A  
Accepted For Credit: CSU & UC  
This course presents a historical overview of the emergence of rock and roll music as a cultural phenomenon in the U.S. The major figures of the 1950's – Bill Haley, Fats Domino, Elvis Presley, Chuck Berry, and Little Richard – will be studied alongside the major historical events and trends that shaped this decade. The course is designed to gradually develop a student's appreciation for this art form while simultaneously exposing the symbiotic interrelationship between rock and American Culture. The course will chart how rock & roll simultaneously reflects and affects society by grounding the key people, events, and songs within their historical context. (GC)

HIST-142  History of Rock and Roll: Music and Culture of the 1960's  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: IS-143, MUS-123  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course charts the evolution of Rock and Roll music from the late 1950's through the 1960's, focusing on the history of the period as well as a detailed analysis of the stylistic development of this important musical genre. The course is designed to gradually develop students' appreciation for this art form while simultaneously exposing the symbiotic interrelationship between rock and American society. (GC)

HIST-143  History of Rock and Roll: Music and Culture Since 1970  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: MUS-125  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course examines the development of popular music and its relationship to general culture and society since 1970. It will include identification and analysis of art rock, disco, new wave, reggae, rap, hip-hop, worldbeat, and other musical genres through online reading, lectures, and in-class demonstrations. (GR)

INTERDISCIPLINARY STUDIES  
Division: Fine Arts, Business, and Communication Studies

IS-100  Survey of the Arts  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: ART-100, MUS-100, TD-100  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
In this course theatre, art, and music are explored through discussion, historical review, and contemporary issues. The purpose of this course is to increase students' understanding and enjoyment of the arts. Requires attendance at selected events offered by Ohlone College at the Gary Soren Smith Center for the Fine and Performing Arts. (GC)

IS-110  Introduction to Ethnic Studies  
54.00 hrs lecture  
Units: 3.00  
Advisory: Eligible for ENGL-151B and ENGL-163  
Accepted For Credit: CSU & UC  
This course is an introduction to the historical experiences of selected ethnic minority communities in the United States which affect how minorities view themselves in relationship to the larger United States society. Exploration of such issues as affirmative action, differential educational needs, and cross-cultural learning and communication patterns will be studied. (GC)

IS-120  Women of the Western World  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: WS-120  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course is an interdisciplinary course involving an overview of women's traditional roles in the western world; the history of the feminist movement, past and present; and an attempt to define the changing role of women in a diverse contemporary American society. Cross-cultural information about women's roles in other societies will be regularly introduced. (GC)

Did you know???

$1.6 million is the average lifetime earnings of a graduate with an associate’s degree – $400,000 more than for a high school graduate.  
Source: Community College League of California
**IS-142**  
**A History of Early Rock and Roll: Music and Culture of the 1950's**  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: HIST-141, MUS-122  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course presents a historical overview of the emergence of rock and roll music as a cultural phenomenon in the U.S. The major figures of the 1950's – Bill Haley, Fats Domino, Elvis Presley, Chuck Berry, and Little Richard – will be studied alongside the major historical events and trends that shaped this decade. The course is designed to gradually develop a student's appreciation for this art form while simultaneously exposing the symbiotic interrelationship between rock and roll and American culture. The course will chart how rock and roll simultaneously reflects and affects society by grounding the key people, events, and songs within their historical context. (GC)

**IS-143**  
**History of Rock and Roll: Music and Culture of the 1960's**  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: HIST-142, MUS-123  
Advisory: ENGL-101A  
Accepted For Credit: CSU & UC  
This course charts the evolution of Rock and Roll music from the late 1950's through the 1960's, focusing on the history of the period as well as a detailed analysis of the stylistic development of this important musical genre. The course is designed to gradually develop students' appreciation for this art form while simultaneously exposing the symbiotic interrelationship between rock and American society. (GC)

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**INTERIOR DESIGN**

Division: Fine Arts, Business, and Communication Studies

**ID-150A**  
**Interior Design Concepts**  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: ART-150A  
Accepted For Credit: CSU  
In this introductory course, students analyze interiors using basic design concepts, principles, and techniques used by professional interior designers, and case studies in problem solving with an emphasis on residential interiors are presented. (GC)

**ID-150B**  
**Interior Design**  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-150B  
Prerequisite: ID-150A or ART-150A  
Accepted For Credit: CSU  
This course is a continuation of ID-150A. Interior design theories and methodologies are explored in depth through case studies emphasizing the design of public space. Repeatable = 3 times (GC)

**ID-151**  
**Visualization and Presentation**  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-151  
Accepted For Credit: CSU  
This course familiarizes students with current methods and materials used in the design industry to develop concepts and communicate ideas. Students will prepare projects for a design portfolio. Repeatable = 3 times (GC)

**ID-153**  
**History of Decorative Arts**  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: ART-153  
Accepted For Credit: CSU & UC  
Students study furniture construction, styles, and periods in conjunction with the architecture and related decorative arts of each era from ancient times to the present. This course includes political, religious, and cultural histories which significantly influenced these arts. (GC)

**ID-154**  
**Contemporary Home Design**  
36.00 hrs lecture  
Units: 2.00  
Cross-referenced Course: ART-154  
Accepted For Credit: CSU  
Students study the architectural history of home design and learn practical applications of information relating to design, construction methods, and economic practices. (GC)

**ID-155A**  
**Architectural Drafting for Interior Design**  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-155A  
Advisory: Concurrent with ART-163, GA-163, ID-163  
Accepted For Credit: CSU  
This course will introduce basic drafting techniques as related to architectural working drawings for interior design. Construction materials and procedures will be discussed. Repeatable = 3 times (GC)

**ID-155B**  
**CAD for Interior Design**  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-155B  
Advisory: ID/ART-155A  
Accepted For Credit: CSU  
This course focuses on the fundamentals of computer-aided drafting as related to interior design and architectural drawings. Understanding CAD concepts and using commands are emphasized. Drawing skills are learned and developed by applying these concepts to solve practical laboratory problems. Repeatable = 3 times (GC)

**ID-156**  
**Architectural Modelmaking for Interior Design**  
36.00 hrs lecture, 72.00 hrs lab  
Units: 3.00  
Cross-referenced Course: ART-156  
Accepted For Credit: CSU  
Scale models will be developed in this class for presenting and studying architectural interior spaces. A wide range of materials and processes will be explored. Repeatable = 3 times (GC)

**ID-157**  
**Professional Practice for Interior Design**  
54.00 hrs lecture  
Units: 3.00  
Cross-referenced Course: ART-157  
This class introduces basic business practices for interior designers. It also includes an overview of career paths, business planning and organization, professional associations, marketing, sales, wholesale resource development, contractual obligations, and ethics. It is designed for people preparing to enter the field of interior design. (GC)
TEXTILES

ID-158
Textiles
36.00 hrs lecture, 72.00 hrs lab
Units: 3.00
Cross-referenced Course: ART-158
Accepted For Credit: CSU & UC
This is a comprehensive course in the study of textiles as related to interior design. Fiber and fabric construction and characteristics are examined; textile choices are evaluated and analyzed for safety, functionality, and aesthetics; and the impacts of textiles on interior environments are considered. Students gain an empirical understanding of the nature of textiles through hands-on projects in the laboratory component. Repeatable = 3 times (GC)

APPLIED DESIGN: RESIDENTIAL LIGHTING

ID-159A
Applied Design: Residential Lighting
18.00 hrs lecture
Units: 1.00
Cross-referenced Course: ART-159A
Accepted For Credit: CSU
This seminar will present an overview of basic considerations necessary to plan, choose, and place lighting fixtures throughout a home to help define space, articulate atmosphere, direct attention, and facilitate activities. (GC)

COLOR FOR THE HOME

ID-159B
Applied Design: Color for the Home
18.00 hrs lecture
Units: 1.00
Cross-referenced Course: ART-159B
Accepted For Credit: CSU
This seminar explores theoretical and experiential approaches to choosing color schemes for residences. (GC)

DIGITAL ARTS LAB – MACINTOSH

ID-163
Digital Arts Lab – Macintosh
27.00 hrs lab
Units: 0.50
Cross-referenced Course: ART-163, GA-163
This course is a lab component for all courses taught on the Macintosh and on drafting equipment in these areas: Art, Graphic Arts/Computer Graphics, Photography, and Interior Design. Students will produce digital graphic and drafting projects for art related classes. Repeatable = 3 times (CR)

DISCOURSE ANALYSIS: ASL

INT-106
Discourse Analysis: ASL
54.00 hrs lecture
Units: 3.00
Prerequisite: Acceptance into the IPP
Accepted For Credit: CSU
This course is an overview of ASL discourse. Topics include discourse structure, language variation, genre, register, prosody, cohesion, turn-taking and backchanneling and gendered communication. Transcription conventions will be reviewed for noting language samples. Repeatable = 1 time (GR)

INTERPRETING AS A CAREER

INT-101
Interpreting As a Career
18.00 hrs lecture
Units: 1.00
Accepted For Credit: CSU
This course gives students general information about the field of interpreting. Topics include history, definitions of interpreting, modes and methods, the need for interpreting, code of ethics, interpreting settings, and evaluation and certification of interpreters. (GC)

MULTILINGUALISM: ASL AND ENGLISH

INT-112
Comparative Linguistics: ASL and English
54.00 hrs lecture
Units: 3.00
Prerequisite: Acceptance into IPP
Accepted For Credit: CSU
This course is designed for first year Interpreting Program students. The syntactic structures of ASL are reviewed, followed by an in-depth study of English syntax as it relates to semantics and interpreting. Repeatable = 1 time (GR)

INTERPRETING PREPARATION SKILLS

INT-115
Interpreting Preparation Skills
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Prerequisite: Acceptance into the IPP
Accepted For Credit: CSU
This course provides the theoretical basis for interpretation. The interpreting process is broken down into process parts, isolated, and then practiced. Skills include memory, discrimination, cloze, discourse analysis, content mapping, summarizing and paraphrasing skills. Expressive fingerspelling is also practiced. Repeatable = 1 time (GR)

Photo courtesy of Jaclyn Vetter.
INT-116 Discourse Analysis: English
54.00 hrs lecture
Units: 3.00
Accepted For Credit: CSU
This course is an overview of English discourse. Topics include discourse structure, language variation, genre, register, prosody, cohesion, turn-taking, and gendered communication. Transcription conventions will be reviewed for noting language samples. (GC)

INT-127 Ethics I
18.00 hrs lecture
Units: 1.00
Accepted For Credit: CSU
This course will focus on identifying and exploring students’ personal ethics and beliefs as well as those of the U.S. majority culture. (GC)

INT-145 Practicum: Deaf Mentorship
243.00 hrs lab
Units: 4.50
Prerequisite: Completion of first semester IPP courses
Accepted For Credit: CSU
This course is designed to provide IPP students’ exposure to Deaf adults and the role of the interpreter in a variety of settings. Students may be provided the opportunity to do some low-risk interpreting. A weekly seminar is included to process experiences of practicum experience. (GR)

INT-147 Introduction to Interpreting for People Who Are Deaf/Blind
36.00 hrs lecture
Units: 2.00
Accepted For Credit: CSU
This course exposes students to background information about people who are Deaf-Blind including modes and principles of communication, aspects of the community, and guiding techniques. (GR)

INT-153 Interpreting: ASL to English
72.00 hrs lecture, 108.00 hrs lab
Units: 6.00
Corequisite: INT-145, INT-147, INT-199A, INT-199B
Accepted For Credit: CSU
The focus of this course is interpreting from ASL into spoken English. Texts will be analyzed for language use and meaning and interpreted into English, both written and spoken. Consecutive and simultaneous interpreting will be studied and practiced. (GC)

INT-160 Simultaneous Interpretation: English/ASL
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Prerequisite: Completion of first year IPP courses
Corequisite: INT-161, INT-173, INT-175
Accepted For Credit: CSU
This course is designed to give IPP students theoretical and practical experience in simultaneous interpreting. The target language is ASL. Skill focus includes developing dual task capabilities, whole language processing, discourse analysis, lag time, fluency, and sign clarity. Repeatable = 1 time (GR)

INT-161 Simultaneous Interpreting: ASL/English
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Prerequisite: Completion of first year IPP courses
Corequisite: INT-160, INT-173, INT-175
Accepted For Credit: CSU
This course is designed to expose IPP students to theoretical and practical experience in simultaneous interpreting. The target language is standard spoken English. Emphasis is on English grammatical structure, process time, vocal inflection, voice clarity, and monitoring. Clarification and correction techniques will be practiced. Repeatable = 1 time (GR)

INT-173 Interpretation in Specialized Settings
54.00 hrs lecture
Units: 3.00
Prerequisite: Completion of first year IPP courses
Corequisite: INT-160, INT-161, INT-173
Accepted For Credit: CSU
This course examines the various work settings of interpreters. Discussion and role play format this course. Telephone, educational, medical, mental health, platform and conference, community, and religious interpreting are covered. This course is taught in ASL only. Repeatable = 1 time (GR)

INT-175 Specialized Interpreting Technique
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Prerequisite: Completion of first year IPP courses
Corequisite: INT-160, INT-161, INT-173
Accepted For Credit: CSU
This course is designed to give students the background, exposure, and strategies necessary when interpreting for specialized populations, such as foreign-born, deaf-blind, and oral Deaf adults. Specialized techniques that are taught include dialogic (interactive) interpreting, team interpreting, and interpreting for media presentation. Interpreting in a multicultural world will also be addressed. Repeatable = 1 time (GR)

INT-180 Ethics, Role, Responsibility
54.00 hrs lecture
Units: 3.00
Prerequisite: Completion of three semesters of IPP courses
Corequisite: INT-181 and INT-190
Accepted For Credit: CSU
Through lecture, discussion, and role play this course will define ethics related terms, discuss values in American society, and those values that underlie the code of ethics of the Registry of Interpreters for the Deaf (RID). Further clarification of interpreter role, professional behavior, the business of interpreting, RID Certification, and professional liability will be included. This course is taught in ASL only. Repeatable = 1 time (GR)

INT-190 Interpreting Internship
270.00 hrs lab
Units: 5.00
Prerequisite: Completion of three semesters of IPP courses
Corequisite: INT-180 and INT-181
This course is designed to give IPP students a concentrated field experience in interpreting. Students will spend 200 hours working in several facilities providing interpreting services to Deaf individuals. Students will have on-site, RID-certified interpreters as their supervisors. A weekly seminar with the instructor will focus on interpreting issues and fieldwork experiences. Repeatable = 1 time (GR)
**INT-191A**  
**ASL Interpreting Workshops**  
18.00 hrs lecture  
Units: 1.00  
Prerequisite: Working interpreter experience; four semesters of ASL  
Accepted For Credit: CSU  
This course is a workshop for working interpreters covering selected topics in the field of sign language interpreting. The theme and content of each workshop varies and is determined by the faculty. Repeatable = 3 times (CR)

**INT-191B**  
**ASL Interpreting Workshops**  
36.00 hrs lecture  
Units: 2.00  
Prerequisite: Working interpreter experience; four semesters of ASL  
Accepted For Credit: CSU  
This course is a workshop for working interpreters covering selected topics in the field of sign language interpreting. The theme and content of each workshop varies and is determined by the faculty. Repeatable = 3 times (CR)

**INT-195A1**  
**Work Experience Education – Vocational**  
75.00 hrs lab  
Units: 1.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) (GC)

**INT-195A2**  
**Work Experience Education – Vocational**  
150.00 hrs lab  
Units: 2.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) (GC)

**INT-195A3**  
**Work Experience Education – Vocational**  
225.00 hrs lab  
Units: 3.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) (GC)

**INT-195A4**  
**Work Experience Education – Vocational**  
300.00 hrs lab  
Units: 4.00  
Accepted For Credit: CSU  
Work experience education for students employed in jobs directly related to a major. Units received are based on hours worked. (GC) (GC)

**INT-199A**  
**Introduction to Multicultural Issues in Interpreting**  
18.00 hrs lecture  
Units: 1.00  
Corequisite: INT-145, INT-147, INT-153, INT-199B  
Accepted For Credit: CSU  
This course introduces students to multicultural issues important to people working in a helping profession. Populations to be highlighted are American Indian/Native Americans, African American/Black, Asian and Pacific Islanders, and Latino. (GC)

**INT-199B**  
**Introduction to Oral Facilitation**  
9.00 hrs lecture  
Units: 0.50  
Corequisite: INT-145, INT-147, INT-153, INT-199A  
Accepted For Credit: CSU  
This course introduces students to working with Deaf people who do not know sign language. Techniques for oral transmission of information will be covered. (GC)

**INT-199C**  
**Introduction to Medical Interpreting**  
18.00 hrs lecture  
Units: 1.00  
Corequisite: INT-237, INT-240, INT-253, or instructor approval for working and Deaf interpreters  
Accepted For Credit: CSU  
This course introduces students to interpreting in the medical setting. Topics include the wide variety of situations and consumers in the setting, environmental considerations, interpersonal considerations, medical discourse, situational ethics, and resources. (GC)

**INT-199D**  
**Introduction to Educational Interpreting K-12**  
18.00 hrs lecture  
Units: 1.00  
Corequisite: IPP students must be in their third semester classes and have passed all second semester courses with C or better. This course is also open to working interpreters. Deaf interpreters are welcome.  
Accepted For Credit: CSU  
An introduction to interpreting in the educational setting with a focus on elementary and secondary levels of education. Emphasis will be on child development through the years, resource development, team building, roles and responsibilities, communicating with children, and situational ethics. (GC)

**INT-199E**  
**Introduction to Post-Secondary Interpreting**  
9.00 hrs lecture  
Units: 0.50  
Corequisite: IPP students must be in their second year; also open to working and Deaf interpreters with instructor approval.  
Accepted For Credit: CSU  
This course is an introduction to interpreting in the post-secondary educational setting. The focus of this course is on the roles and responsibilities of the interpreter; language assessment, resource development, situational ethics, identifying demands and controls in the wide variety of post-secondary educational settings, and team building. (GC)

**INT-199F**  
**Introduction to Social Service and Employment**  
9.00 hrs lecture  
Units: 0.50  
Prerequisite: INT-145, INT-147, INT-153, INT-199A  
Corequisite: Students must be registered in all third semester courses: INT-227, INT-245, INT-253 and other INT-199 series courses. Working interpreters and Deaf Interpreters may join with instructor or Division Office approval.  
Accepted For Credit: CSU  
This course introduces students to interpreting in the social service and employment setting. Topics include the wide variety of situation and consumers in this setting, environmental, interpersonal considerations, vocabulary and discourse unique to these settings, situational ethics and resources. (GC)

**INT-199G**  
**Introduction to Telephone and Video Relay Interpreting**  
9.00 hrs lecture  
Units: 0.50  
Prerequisite: INT-227, INT-245, INT-253, and INT-199 series courses. Non-IPP students must have approval of instructor or program director.  
Corequisite: INT-263, INT-295, INT-299, and other INT-199 courses; BA-121A and BA-121B  
Accepted For Credit: CSU  
This course introduces students to interpreting using the telephone and video, interpreting remotely. Unique characteristics of this medium, strategies, discourse styles as well as environmental, interpersonal, paralinguistic and intra-personal considerations will be discussed. Ethics will also be considered. (GC)
INT-199H Introduction to Mental Health Interpreting
9.00 hrs lecture
Units: 0.50
Prerequisite: INT-245, INT-253, INT-227 and various INT-199 courses.
Corequisite: IPP students must be enrolled in other third and/or fourth semester courses. Working interpreters and Deaf interpreters must get approval of instructor or program director.
Accepted For Credit: CSU
This course introduces students to interpreting in the mental health setting. Topics include the wide variety of situations and consumers in the setting, environmental considerations, interpersonal considerations, mental health discourse, situational ethics and resources. (GC)

INT-199I Introduction to Deaf/Hearing Team Interpreting
9.00 hrs lecture
Units: 0.50
Prerequisite: INT-253
Corequisite: INT-263, INT-295, INT-299 and other INT-199 courses. Deaf and working interpreters must have approval of instructor or program director.
Accepted For Credit: CSU
This course introduces students to working in teams with a hearing and Deaf interpreters. Topics include advocating for the use of Deaf/hearing teams, environmental and interpersonal considerations, team development, negotiating strategies of working together, and ethical and cultural considerations. (GC)

INT-227 Ethics II: Interpreting Ethics and Decision-Making
54.00 hrs lecture
Units: 3.00
Prerequisite: First unit course on personal ethics as well as INT-145, INT-147, INT-153, and 199A
Corequisite: INT-245, INT-253, and courses offered in the INT-199 series
Accepted For Credit: CSU
Though lecture, discussion, and role play, this course will cover ethics as it relates to the field of sign language interpreting, the Code of Professional Conduct (CPC) from the Registry of Interpreters for the Deaf (RID), professional behavior, liability, and preparation for the ethical portion of the national RID exam. Demand-Control Schema (DCS) will be the lens used to determine effectiveness of actions taken by interpreters. (GR)

INT-245 Phantom Interpreting
18.00 hrs lab
Units: 1.00
Prerequisite: INT-145, INT-147, INT-153, and INT-199A
Corequisite: INT-253, INT-227, and at least one of the INT-199 courses offered
Accepted For Credit: CSU
Students will apply knowledge gained in the first year courses by interpreting live situations on campus and in the community. Students will apply Demand-Control schema analysis of situations, assignment preparation. (GR)

INT-253 Interpreting: English to ASL
72.00 hrs lecture, 108.00 hrs lab
Units: 6.00
Prerequisite: INT-145, INT-147, INT-153, INT-199A, and other courses in INT-199 series.
Accepted For Credit: CSU
The focus of this course is interpreting from English into ASL. Texts will be analyzed for language use and meaning and interpreted into ASL. Consecutive and simultaneous interpreting will be studied and practiced. (GR)

INT-253 Interpreting Across the Language Continuum
54.00 hrs lecture, 54.00 hrs lab
Units: 4.00
Prerequisite: INT-295, INT-299, and INT-199 series
Accepted For Credit: CSU
This focus of this course is to interpret and match a wide range of language varieties that exist in the Deaf community. Monologic and dialogic/interactive texts will be presented. Live and videotaped stimuli will be used. (GR)

INT-295 Interpreting Internship
243.00 hrs lab
Units: 4.50
Prerequisite: Completion of three semesters of IPP courses
Accepted For Credit: CSU
This course is designed to provide IPP students’ exposure to Deaf adults and the role of the interpreter in a variety of settings. Students may be provided the opportunity to do some low-risk interpreting. A weekly seminar is included to process experiences of practicum experience. Repeatable = 1 time (GR)

INT-299 Capstone Course
54.00 hrs lab
Units: 1.00
Prerequisite: INT-227, INT-245, INT-253, and INT-199 series courses
Corequisite: INT-263, INT-295, and various INT-199 courses
Accepted For Credit: CSU
This is the final course of the IPP. Students will interpret analyze and present a piece of work for a panel. Students will also create their exit portfolio. (GR)

JAPANESE
Division: Humanities, Social Sciences, and Mathematics

JPNS-101A Elementary Japanese
90.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
Introduction to speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (GR)

JPNS-101B Elementary Japanese
90.00 hrs lecture, 18.00 hrs lab
Units: 5.00
Prerequisite: JPNS-101A or two years of high school Japanese
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU & UC
This course is a continuation of speaking, understanding, reading, and writing Japanese. A communicative approach to the acquisition of the language with emphasis on the appreciation of the culture. (GR)
### JOURNALISM

Division: Fine Arts, Business, and Communication Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Description</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Lab Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOUR-101A</td>
<td>Newswriting</td>
<td>This course trains students in newswriting techniques, interviewing, feature writing, ethics, and legal responsibilities. Online and broadcasting newswriting techniques are included.</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
</tr>
<tr>
<td>JOUR-106</td>
<td>Censorship and Literature</td>
<td>This literature course focuses on the issues of censorship and obscenity. Selected works will be closely examined in an attempt to encourage students to formulate their own standards in this controversial area.</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
</tr>
<tr>
<td>JOUR-132</td>
<td>Introduction to Public Relations</td>
<td>Demonstrate knowledge of the field and practice of public relations. Explain public relations history, theories, and techniques. Employ practical approach to creating press releases, organizing and executing public relations campaigns. Practice ethical- and research-based responses to challenges facing organizations.</td>
<td>3.00</td>
<td>54.00</td>
<td></td>
</tr>
<tr>
<td>JOUR-146</td>
<td>Photography/Graphic Arts Newspaper Staff</td>
<td>Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to Macintosh computers, scanners, and PhotoShop for completion of assignments. Students are also introduced to legal and ethical responsibilities. JOUR-146 students are expected to produce one photo/graphic per issue. Repeatable = 3 times to a maximum of 9 units (GC)</td>
<td>3.00</td>
<td>36.00</td>
<td>54.00</td>
</tr>
<tr>
<td>JOUR-147</td>
<td>Photography/Graphic Arts Newspaper Staff</td>
<td>Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to Macintosh computers, scanners, and PhotoShop for completion of assignments. Students are also introduced to legal and ethical responsibilities. JOUR-147 students are expected to produce two photos or graphics per issue. Repeatable = 3 times to a maximum of 9 units (GC)</td>
<td>2.00</td>
<td>36.00</td>
<td>54.00</td>
</tr>
<tr>
<td>JOUR-148</td>
<td>Photography/Graphic Arts Newspaper Staff</td>
<td>Staff members initiate, plan, and complete photographic or graphic art assignments for publication in the college newspaper and/or magazine. Training emphasizes use of techniques and skills that communicate ideas effectively to a mass media audience. Photographers and artists have access to digital cameras, Macintosh computers, scanners, and PhotoShop for completion of assignments. Students are also introduced to legal and ethical responsibilities. JOUR-148 students are expected to produce three photos or graphics per issue. Repeatable = 3 times to a maximum of 9 units (GC)</td>
<td>1.00</td>
<td>36.00</td>
<td>54.00</td>
</tr>
<tr>
<td>JOUR-155</td>
<td>Mass Media and Society</td>
<td>We swim in an ocean of media. Our thoughts, beliefs, life choices, jobs, government, and shopping decisions are all influenced by the media. Most of us complain about it, but we wouldn't turn the media off, even if we could. Yet we don't know much about it. Who decides what messages get sent? What do the senders want? How do we process the messages? How does the technology work? Your media exposure will continue for the rest of your life. This class aims to make you a more informed, critical consumer. (GR)</td>
<td>1.00</td>
<td>36.00</td>
<td>54.00</td>
</tr>
</tbody>
</table>

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### Did you know???

In 2009-2010 California Community Colleges awarded 85,040 associate degrees.  
Source: Community College League of California
JOUR-170  Newspaper Writing and Editing Staff
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Advisory: Completion of, or concurrent enrollment in, JOUR-101A
Accepted For Credit: CSU
Staff members gather information, write, and edit stories for publication in the college newspaper, the Monitor, and on the Monitor’s online edition. They also write columns and editorials. Working as a team, the staff plans and designs each issue. JOUR-170 students are expected to contribute one story per issue. Repeatable = 3 times to a maximum of 9 units for JOUR-170-172 (GR)

JOUR-171  Newspaper Writing and Editing Staff
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: Completion of, or concurrent enrollment in, JOUR-101A
Accepted For Credit: CSU
Staff members gather information, write, and edit stories for publication in the college newspaper, the Monitor, and on the Monitor’s online edition. They also write columns and editorials. Working as a team, the staff plans and designs each issue. JOUR-171 students are expected to contribute two stories per issue. Repeatable = 3 times to a maximum of 9 units for JOUR-170-172 (GR)

JOUR-172  Newspaper Writing and Editing Staff
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Advisory: Completion of, or concurrent enrollment in, JOUR-101A
Accepted For Credit: CSU
Staff members gather information, write, and edit stories for publication in the college newspaper, the Monitor, and on the Monitor’s online edition. They also write columns and editorials. Working as a team, the staff plans and designs each issue. JOUR-172 students are expected to contribute three stories per issue. Repeatable = 3 times to a maximum of 9 units for JOUR-170-172 (GR)

JOUR-173  Magazine Writing and Editing Staff
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
In this class, students write stories, take photos, make illustrations, design pages, and produce the yearly college magazine, Midnight. The class provides practical experience for Communication Arts majors and others considering careers in newspapers, magazines, online publications, or public relations. For all students, it offers insight into how a mass medium operates, its internal conflicts and external effects, as well as an opportunity to learn to write effectively and to work harmoniously with others. JOUR-173 students are expected to contribute one story or graphic per issue. Repeatable = 3 times to a maximum of 9 units for JOUR-173-175 (GR)

JOUR-174  Magazine Writing and Editing Staff
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
In this class, students write stories, take photos, make illustrations, design pages, and produce the yearly college magazine, Midnight. The class provides practical experience for Communication Arts majors and others considering careers in newspapers, magazines, online publications, or public relations. For all students, it offers insight into how a mass medium operates, its internal conflicts and external effects, as well as an opportunity to learn to write effectively and to work harmoniously with others. JOUR-174 students are expected to contribute two stories or graphics per issue. Repeatable = 3 times to a maximum of 9 units for JOUR-173-175 (GR)

JOUR-175  Magazine Writing and Editing Staff
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Advisory: Eligible for ENGL-101A
Accepted For Credit: CSU
In this class, students write stories, take photos, make illustrations, design pages, and produce the yearly college magazine, Midnight. The class provides practical experience for Communication Arts majors and others considering careers in newspapers, magazines, online publications, or public relations. For all students, it offers insight into how a mass medium operates, its internal conflicts and external effects, as well as an opportunity to learn to write effectively and to work harmoniously with others. JOUR-175 students are expected to contribute three stories or graphics per issue. This course is usually reserved for managers and editors. Repeatable = 3 times to a maximum of 9 units for JOUR-173-175 (GR)

JOUR-176  Advertising Staff
9.00 hrs lecture, 27.00 hrs lab
Units: 1.00
Advisory: BA-129
Accepted For Credit: CSU
This course offers practical experience in advertising production related to the student newspaper and magazine. Staff members sell and design ads, maintain regular accounts, and solicit new advertisers. JOUR-176 students are expected to make one ad contact per week. Repeatable = 3 times to a maximum of 9 units for JOUR-176-178 (GR)

JOUR-177  Advertising Staff
18.00 hrs lecture, 54.00 hrs lab
Units: 2.00
Advisory: BA-129
Accepted For Credit: CSU
This course offers practical experience in advertising production related to the student newspaper and magazine. Staff members sell and design ads, maintain regular accounts, and solicit new advertisers. JOUR-177 students are expected to make two ad contacts per week. Repeatable = 3 times to a maximum of 9 units for JOUR-176-178 (GR)

JOUR-178  Advertising Staff
36.00 hrs lecture, 54.00 hrs lab
Units: 3.00
Advisory: BA-129
Accepted For Credit: CSU
This course offers practical experience in advertising production related to the student newspaper and magazine. Staff members sell and design ads, maintain regular accounts, and solicit new advertisers. JOUR-178 students are expected to make three ad contacts per week. This course is usually reserved for managers and editors. Repeatable = 3 times to a maximum of 9 units for JOUR-176-178 (GR)