

# CHAPTER 5: COURSE DESCRIPTIONS AND INFORMATION



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## COURSE INFORMATION KEYS

### GRADING

<b>L=</b>	Letter Grade Only
<b>K=</b>	Mandatory Pass/No Pass
<b>O=</b>	Optional Pass/No Pass
<b>N=</b>	Non-Graded

### DEGREE APPLICABLE

<b>A.A. =</b>	Applies to an Associate of Arts Degree
<b>A.S. =</b>	Applies to an Associate of Science Degree
<b>NAA =</b>	Offered in credit mode but does not apply to an A.A. or A.S. Degree
<b>AA-T and AS-T =</b>	Associate Degrees for Transfer
<b>NC =</b>	Non-credit course
<b>District G.E.=</b>	Meets criteria for District General Education
<b>CSU G.E.=</b>	Meets criteria for California State University General Education
<b>IGETC=</b>	Meets criteria for IGETC (applicable to both CSU and UC system)

### TRANSFER STATUS

<b>CSU=</b>	Course has been accepted by the CSU and will be on Baccalaureate list
<b>UC=</b>	Course has been accepted by the University of California System
<b>UC+=</b>	UC will accept a total 6 units of these courses with some stipulations

**Course Sequence:** Capital letters following the course number indicate that two (A, B) or more semesters form a sequence. The A semester must be completed before the B, etc., unless specifically noted in the course description.

**Course Number and Titles:** Course is identified by a course number and brief title.

**Course Description:** A brief statement identifies the scope and purpose of the course, and in many instances, the students who should take it.

A course may not be repeated for credit unless it is stated at the end of the course description. A counselor may require the student to obtain the instructor's written consent before instructing the student to enroll in a course if it is to be repeated for credit.

**Units:** Identifies the number of units that are earned upon successful completion of the course, or courses in a sequence.

**Grading:** Indicates the type of grading available for that course. For example, Grading: L means the course may be taken for letter grade only. All courses may be offered during the day, evening, and/or weekend sessions. The offering of any course described is contingent upon adequate enrollment.

## COURSE PREREQUISITES AND COREQUISITES

### Definitions

"Prerequisite" means a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.

"Corequisite" means a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.

**Note:** Prerequisites and Corequisites are listed under each course in the schedule of classes and catalog.

### Prerequisite and Corequisite Challenge

A prerequisite or corequisite may be challenged for any of the following reasons:

1. The student has the knowledge or ability to succeed despite not meeting the prerequisite or corequisite
2. The prerequisite has not been made reasonably available to the student
3. The prerequisite has not been established in accordance with the District's process for establishing prerequisites or corequisites
4. The prerequisite or corequisite is discriminatory or applied in a discriminatory manner
5. The prerequisite was established in violation of Title 5

### Verification of Equivalency

If the student believes that he/she has completed the prerequisite(s) or corequisite(s) for this course as listed in the schedule of classes or catalog based on previous coursework at another institution, he/she should have transcripts or other evidence of meeting the course prerequisite.

### Challenge Process

If the student believes that he/she has completed the prerequisite(s) or corequisite(s) for this course as listed in the schedule of classes or catalog based on previous coursework or personal experience, he/she may do the following:

1. Pick up a Prerequisite Challenge Form at the Office of Admissions and Records, and complete the required information. Attach transcripts or other evidence of meeting the course prerequisite.
2. Turn in completed form to Admissions and Records and register for the class. This registration is temporary pending approval of the prerequisite challenge process.
3. See a Counselor or Instructor if additional information is needed.

4. If still unresolved, student can meet with the Instructional Dean in the discipline to present his/her case.

The College will provide a final response to the prerequisite challenge within 5 working days.

## ADVISORIES ON RECOMMENDED PREPARATION (ADVISORY LEVELS)

### Definition

"Advisory on recommended preparation" means a condition of enrollment that a student is advised, but not required to meet before, or in conjunction with, enrollment in a course or educational program.

Advisory Levels are typically met through completion of reading, writing, or math courses listed in the schedule of classes and catalog. Although these levels are advisory rather than mandatory, students are strongly encouraged to adhere to them and to follow the advice of their counselors related to the advisory levels.

### Location

Advisory Levels are listed under each course in the schedule of classes and catalog.

## OPEN CURRICULUM

An Open Curriculum class is a class that has no prerequisites of any kind. However, some courses, such as English 321 and Math 310, may require that placement test results be on file prior to the first day of class. Classes such as this with an additional requirement are marked with an \* after the words "open curriculum."

## ADVISORY MATH LEVELS

Math levels are advisory only for courses outside of the math discipline.

**Advisory Math Level 1:** arithmetic skills including fractions, decimals, and percentages

List of courses that will provide this skill level:

1. 3 units of MATH 310 with a P grade or
2. ACCTG 101

**Advisory Math Level 2:** beginning algebraic skills

List of courses that will provide this skill level:

1. Math 111, with a P grade or placement based on assessment

**Advisory Math Level 3:** intermediate algebraic skills

List of courses that will provide this skill level:

1. MATH 013, with a C grade or higher or
2. BUS 060, with a C grade or higher

**Advisory Math Level 4:** advanced algebraic and trigonometric skills (sometimes called pre-calculus)

List of courses that will provide this skill level:

1. MATH 025 or (MATH 021 and 022), with a C grade or higher

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**Advisory Math Level 5:** first semester calculus

List of courses that will provide this skill level:

1. MATH 071, with a C grade or higher

**Advisory Math Level 6:** second semester calculus

List of courses that will provide this skill level:

1. MATH 072, with a C grade or higher

**Advisory Math Level 7:** multivariate calculus or differential equations or linear algebra.

List of courses that will provide this skill level:

1. MATH 073 or 078 or 079, with a C grade or higher

### ADVISORY WRITING LEVELS

**Advisory Write Level 2:** having the ability to write simple, compound, and complex sentences; develop a written paragraph; and to use correct grammar and spelling.

List of courses that provide this skill level:

1. ENGL 330 or ENGL 335 (4 units) or
2. ESL 302

A "P" grade is required in all of these courses or placement based on assessment.

**Advisory Write Level 3:** having the ability to write a well-organized five-paragraph essay, use rhetorical modes and methods of organization, write paragraphs with unity and coherence, and use the basic mechanical skills and syntactical arrangements in writing paragraphs.

List of courses that provide this skill level:

1. ENGL 104 or ENGL 092 or
2. ESL 091 (6 units)

A "C" or "P" grade is required in all of these courses or placement based on assessment.

**Advisory Write Level 4:** having the ability to write a well-organized paragraph essay in support of a clearly stated thesis; apply an analytical understanding of college-level text; apply basic research skills and critical thinking skills; and recognize audience, purpose, and tone.

List of courses that provide this skill level:

1. ENGL 001A, with a C grade or higher

### ADVISORY READING LEVELS

**Advisory Read Level 1:** having the ability to find stated and implied main ideas in simple passages; identify important details; understand the use of new vocabulary in textbook reading passages, utilize textbook reading strategies, and understand what it means to read critically.

List of courses that provide this skill level:

1. ENGL 321 or READ 350 or
2. ESL 313

**Advisory Read Level 2:** having the ability to find the state and main idea in simple and complex passages; summarize information; sequence information in complicated texts, engage

in inferential analysis of college reading materials; use study techniques for college textbooks; and use note taking systems.

List of courses that provide this skill level:

1. ENGL 322 or READ 301 or
2. ESL 302

A "P" grade is required in all of these courses or placement based on assessment.

**Advisory Read Level 3:** having the ability to identify the thesis statement in college materials, understand and identify main ideas and supporting details, recognize and identify organizational patterns, make complex inferences, summarize and paraphrase information, separate fact from opinion, recognize connotation and denotation, detect bias, recognize errors in reasoning, use a college level vocabulary, use rate flexibility in reading a wide range of college materials, and use range of other college level reading skills.

List of courses that provide this skill level:

1. ENGL 102 or READ 101 or
2. ESL 091 (6 units)

A "P" grade is required in all of these courses or placement based on assessment.

**Advisory Read Level 4:**

List of courses that provide this skill level:

1. ENGL 001D, with a C grade or higher

### COURSE NUMBERING

#### 1-99

Courses numbered 1-99 generally qualify for the Associate in Arts and Associate in Science degrees and usually include courses that are transferable to meet requirements at four-year institutions.

#### 98

This number is assigned to Independent Directed Study courses in any of the disciplines listed in the catalog. Directed Study courses are approved by the curriculum committee for one of 2 purposes:

1. To allow a student to take an alternative class to fulfill a course requirement for a certificate, major, or associate degree.
2. To allow a student to be able to complete a certificate, major, or associate degree when the course is not being offered during the current semester or is being offered at a time that the student cannot attend. Directed Study courses should be limited to 5 or fewer students. This course requires an individual contract between the student, instructor, and the discipline dean. Units are transferable as elective credit.

#### 100-199

Courses numbered 100-199 also may qualify for the Associate in Arts and Associate in Science degrees, are acceptable for elective credit, and may have transfer value for major field requirements in particular baccalaureate programs.

**210**

These are no-credit courses in which no letter grade is received. These courses require concurrent enrollment in a credit course. They may not be used to satisfy degree requirements of any type.

**300-399**

These are qualifying courses designed to prepare one for entry to basic college courses in the subject field. These courses carry no credit toward the Associate Degree requirement and may not be used to satisfy General Education, Associate Degree, or major requirements. They are not transferable to four-year institutions.

**394**

Individualized Skills Laboratory in any discipline. This nontransferable course provides a framework for any of the disciplines listed in the catalog to offer remedial-level individualized instructional modules that are designed to develop or support the students' experiences below what is available through the regular curriculum.

**500-599**

These are no-credit courses in which no letter grade is received. They may not be used to satisfy degree requirements of any type.

**REPEATING COURSES**

Certain courses may be taken more than once for credit. If the course is designated as repeatable, the course may be repeated only for the number of times allowable. In some cases, a group of courses may carry a collective limitation on the number of allowed repetitions for that entire group/cluster of courses (for example, when a similar educational activity is offered in beginning and advanced course levels.) To determine whether a course is repeatable, refer to Chapter 5: Course Descriptions, in this Catalog.

**Repeating Courses Previously Passed**

State Regulations do not allow students to repeat non-repeatable courses previously passed with satisfactory grades of "A," "B," "C," "Credit" or "Pass." Students with extenuating circumstances may file a Request to Repeat a Course in the Counseling Office. Students who are allowed to repeat courses based on this provision will not earn additional units or grade points toward improving or changing the previous grade earned in the class or toward changing the overall grade point average.

**Limitations on Repeating Courses**

Beginning with the Fall 2009 semester, students who have recorded a substandard grade of either "D," "F," "No Credit" or "No Pass" will only be allowed to repeat the same course two times, for a total maximum enrollment of three times. The student's permanent academic record will be annotated such that all course work that has been taken and forgiven or repeated will remain legible, insuring a true and complete academic history. Unit credit is only allowed once when repeating a D grade. Withdrawals without a mark of "W" are allowed during the first 3 weeks of a 16-week class in a semester or within the first 20 percent of a short-term course. Students shall be

allowed a maximum of three withdrawals for a given course where a mark of "W" is posted for all three withdrawals. In cases in which the student's grade and/or withdrawal was the result of an extenuating circumstance, students may file a petition to repeat a class an additional time (whether the prior enrollment was due to a substandard grade or a withdrawal) in the Counseling Office. Extenuating circumstances are verified accidents, illnesses or other circumstances beyond the control of the student. When course repetition is approved pursuant to this provision, the highest grade and credit earned (if any) shall be disregarded in computing the student's grade point average each time the course is repeated. Participation in an intervention program may be required

**STUDENT LEARNING OUTCOMES**

Student Learning Outcomes (SLOs) indicate the knowledge, skills and abilities that students will demonstrate upon completion of a course or program. In addition to the curriculum course outline and program outline of record, course level SLOs are available to students through the course syllabi. The program SLOs are listed under degrees and certificates in the catalog.

Assessment of learning outcomes is ongoing and documented annually on the evergreen valley college assessment matrices located at <http://www.evc.edu/discover-evc/slos>.





**Accounting****ACCTG-001A - Principles of Financial Accounting****Units: 4**

This introductory course is designed for transfer students in business, information systems, and/or accounting. Topics include the accounting cycle, preparation and analysis of financial statements, internal control, depreciation, inventories, receivables, liabilities, stockholders' equity, ethical issues, and accounting as a decision-making tool.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 101 or MATH 111 with C or better

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-001B - Managerial Accounting****Units: 4**

This transfer course introduces students to managerial decision-making using accounting information. Topics include the master budget, static and flexible budgets, capital budgeting techniques, cost-volume-profit relationships, contribution margin approach to decision-making, cost behavior analysis, job order and process costing, activity-based costing and just-in-time manufacturing. Other topics include standard costing, responsibility accounting, cost performance reporting, special business decisions, incremental analysis, break-even analysis, and pricing under absorption and variable costing.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 020 or ACCTG 001A with C or better or equivalent

*Advisory Level:*      Read: 4      Write: 4      Math: 1  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-022 - Payroll Accounting****Units: 4**

This course is an introduction to payroll accounting laws and procedures that affect payroll calculations, benefits, and deductions for federal and state tax filing and forms. The material is presented through lecture, discussion and a comprehensive payroll project.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 020 or ACCTG 101, with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-030 - QuickBooks****Units: 3**

Students are provided hands-on computer based accounting using QuickBooks, which includes behind-the-scenes accounting. Proper use of QuickBooks business forms for recording sales and receivables, payables and purchases, and payroll will be presented. Students will explore various methods of business problem solving.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Prerequisite: ACCTG 101 or ACCTG 020 or ACCTG 001A, all with a C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-062 - Cost Accounting****Units: 5**

This course provides students with cost accounting principles, including essentials of job order, process cost, and standard cost accounting systems. The central focus of the course is how cost accounting helps managers make better decisions for planning, controlling, and profitability analysis in a business environment as well as costing concepts for products, services, and customers. Topics covered in this course are of significant value in personal financial management as well.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 001B with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-063 - Intermediate Accounting****Units: 5**

This course will cover comprehensive and up-to-date accounting topics. Topics will include the conceptual framework of accounting, income statement, balance sheet and statement of cash flows, inventory, plant assets, depreciation, intangible assets and investments. Emphasis will be placed on the study of Generally Accepted Accounting Principles and their impact on the financial statement presentation required by the Financial Accounting Standards Board.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 001B with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-095 - Individual Income Tax CTEC Approved****Units: 5**

This is a comprehensive Income Tax Course (Part I--Basic; and Part II--Intermediate) with materials prepared by "The Income Tax School." "The Income Tax School" has received approval by the California Tax Education Council (CTEC) to provide a comprehensive Federal and California State Income Tax Course to fulfill the 60-hour qualifying education requirement mandated by California State Law. The material is presented through lecture, discussion, and review problems.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Recommended: ACCTG 020, C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-097 - Accounting for Income Taxes****Units: 3**

This course provides students with an introduction to Federal Individual Income Taxation with emphasis on statutory materials, principles, procedures and terminology. Special attention is given to tax problems encountered by individual taxpayers and the basic concepts of gross income, exclusions, adjusted gross income, deductions, exemptions, and tax credits. Tax planning techniques will be explored. Other tax entities, such as corporations, partnerships and fiduciaries will be discussed. Issues of gift and estate taxation will be reviewed. A comparative analysis of California tax law will be provided.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-101 - Bookkeeping for Small Business Units: 3**

An introduction to accounting principles and procedures that apply to the operations of a small business. The material is presented through lecture and simulation activities including online computer activities. Transactions are analyzed and processed, financial statements are developed, and records are adjusted and closed for a complete accounting cycle for service and merchandising businesses. This course helps to prepare students for positions as accounting assistants or entry level bookkeepers. Course management software will be used to enhance learning.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-105 - Financial Statement Auditing Units: 1**

This course provides students with an overview of the process of auditing a company's financial statements. Successful completion of this course fulfills the requirement for the one semester unit of financial statement auditing for the California CPA certificate.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ACCTG 020 with C or better

*Advisory Level:*      Read:      Write: 4      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ACCTG-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Administration of Justice*****AJ-010 - Introduction to Administration of Justice Units: 3**

Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces that have shaped those principles and approaches.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: None

**AJ-011 - Criminal Law Units: 3**

This course covers concepts of criminal law including history, philosophy, and legal structure. Definitions and classifications of crime, case law analysis, the court system and the U.S. Constitution are examined. Crimes against person, property crimes, and the legal system as a social and cultural ideology are explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: None

**AJ-013 - Criminal Procedures Units: 3**

This course will cover the history, legal terminology, and principles of criminal procedures. Constitutional provisions, interpretation of statutory and case law, legal aspects of arrest, rules governing search and seizure, and institutional responsibilities of the criminal justice system within a multicultural society are examined.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-014 - Contemporary Police Issues Units: 3**

This course focuses on the historical and contemporary role of police in a multicultural society with an emphasis on police hiring and training, police ethics and discretion, institutional accountability, police-community relations, and the challenges and prospects of administering justice within a diverse multicultural population.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: None

**AJ-015 - Introduction to Criminal Investigation Units: 3**

This course covers fundamental principles and procedures of criminal investigation including crime scene management, documentation methods, rules of evidence, and interviewing and interrogation. Modus operandi, sources of information, chain of custody, and investigative techniques related to persons and property crimes are analyzed.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-019 - Law Enforcement in Multicultural Communities Units: 3**

This course examines the complex, dynamic relations between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural society. Topics may include the consensus and conflicting values in culture, religion, and law.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**AJ-110 - Narcotics and Drug Abuse Units: 3**

This course explores the history and classification of legal and illegal psychoactive drugs including physiological and physical effects. Historical and contemporary trends relating to criminalization, decriminalization, addiction, harm reduction, and the relationship between drug use and violence are also examined.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-111 - Juvenile Law and Procedures Units: 3**

This course examines the causes and theories of juvenile delinquency, the function and jurisdiction of juvenile justice agencies, common juvenile statutes, delinquency control, and juvenile court procedures. Particular focus is placed on the role of law enforcement, probation services, schools, resources, and parents/guardians in relation to juvenile delinquency. The rights of juveniles, constitutional cases, and juvenile victimization are also analyzed.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-112 - Introduction to Evidence Units: 3**

This course examines the history, legal standards, and social aspects of the rules of evidence. Burden of proof, rules governing admissibility, hearsay, relevance, and types of evidence are covered. Judicial considerations, documentary evidence, and issues relating to witness examination and competency, and privileges are also explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-113 - Crime and Violence in America Units: 3**

This course examines theories and predictors of violence, the role of victims in the criminal justice system, and approaches to crime measurement. Common crimes including criminal homicide, sex crimes, domestic violence, gang and hate crimes, and elder abuse are also addressed. The legal and social impact of violence on quality-of-life as well as crime prevention, intervention, and treatment strategies are explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-114 - Terrorism Units: 3**

This course examines the history, causes, motivations, and typologies of domestic and international terrorism. Common terrorist tactics and ideologies of political, social, and issue-oriented extremist groups are examined. The role of the government and law enforcement to combat terrorism in a global society is also considered within this context.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-115 - Introduction to Forensic Science Units: 3**

This course covers principles, concepts, and practices of forensic science including identification, collection, comparison, and analysis of different types of physical evidence. Emphasis is placed on standard analytical techniques to identify and examine evidence such as biological fluids, ballistics, impression marks, fingerprints, hair and fibers, questioned documents, controlled substances, and explosives.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-116 - Introduction to Corrections Units: 3**

This course covers the history, theory, and practice of the correctional process in America with critical analysis of adult and juvenile correctional institutions, probation, parole, and community-based alternatives. Specific issues facing correctional systems such as inmate constitutional rights, effects of institutionalization, cost, overcrowding, ethnicity, gender, and aging are also explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-117 - Introduction to Cybercrime Units: 3**

This course introduces students to the origin and emerging trends of computer-related crimes and the common investigative procedures used in collection, documentation, and presentation of cyber-evidence on a domestic and global scale. The course examines federal and state computer crime statutes and common computer crimes including identify theft, computer-persons crimes, financial fraud, and cyberstalking.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-123 - Women and the Criminal Justice System Units: 3**

This course examines the practical and theoretical study of women in the criminal justice system, as offenders, victims, and survivors. Contributions made by women that have influenced and changed the criminal justice system, probation and parole, gender difference in criminal offending, employment, and social and cultural barriers will also be explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AJ-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**Anthropology****ANTH-063 - Introduction to Social and Cultural Anthropology Units: 3**

This course introduces the student to an overview of the field of social and cultural anthropology. Topics include the development of the field of anthropology, the concept of culture, language and communication, subsistence patterns and economic systems. Other topics covered are sex and marriage, family, kinship and descent, political systems, belief systems, the expressive culture and the challenge of globalization.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D, ES      IGETC: 4

**ANTH-090 - Introduction to Pre-Cuahtemoc Mexico Units: 3**

This course will examine the origins, evolution, and experiences of the major indigenous civilizations from Pre-Columbian Mexico. Students will be exposed to the dominant groups from this particular time period which include the Olmecas, Maya, Teotihuacanes, Zapotecas, Mixtecas, Toltecas and the Mexicas. Particular attention will be paid to their geographical location, subsistence patterns, religion, political structure, economy, education, family and marriage patterns, warfare, music, art and the decline of these groups. The course will also examine how this rich heritage has impacted the modern Chicana/o (Mexican American).

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D, ES      IGETC: 4

**Art****ART-012 - Two Dimensional Design Units: 3**

This course is an introduction to the theories and applications of two-dimensional form in visual art and design. The students will use a variety of media, tools and techniques in studying the elements and principles of design, which includes the study of line, shape, volume, value, color, texture, pattern, balance, unity and variety, and scale.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-013 - Three Dimensional Design Units: 3**

This course is an introduction to the theories and applications of design in three-dimensional form in space. Students study the elements and principles of design using a variety of tools, techniques, and mediums which may include wire, cardboard, clay (non-firing), wood, plaster, and other materials at the instructor's discretion, in a studio lab setting. Concepts are introduced and clarified through instructor lectures and demonstrations. Three-dimensional design is a core foundational course required in many art majors. Field trips may be included.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-014 - Color Theory Units: 3**

Students study the principles, theories, and applications of additive and subtractive color in two dimensions. Topics will include major historical and contemporary color systems and the elements of design as they apply to color. Students will produce projects in applied color.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**ART-024 - Beginning Drawing Units: 3**

Students are introduced to the fundamental elements and compositional principles of drawing. Lecture and studio practice will emphasize a variety of media, tools and techniques in studying the elements and principles of drawing, including line, shape, value, perspective, proportion, balance and unity.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-025 - Expressive Drawing Units: 3**

Students will explore artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: O

Prerequisite: ART 024 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-026A - Representational Drawing Units: 3**

This course provides a rigorous study of drawing based on observation and linear perspective. Emphasis is on building skills to render in a naturalistic and representational manner, which includes a study of line, value, texture, volume, mass, and the illusion of spatial depth.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: ART 024 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-035 - Graphic Design I Units: 3**

This course is an introduction to the fundamental concepts, practices, and theories of graphic design. Students will be exposed to visual thinking and the design process. Students will practice professional graphic design techniques and principles from initial conception to final execution. Topics include integration of the principles of design, color, and composition utilizing computers.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-038 - Graphic Design II Units: 3**

This course builds on the visual language achieved in Graphic Design I and further develops communication skills, concepts and theories that create successful visual design. Topics include combining and utilizing design principles and exploration of visual organization theory and informational theory. Emphasis is placed upon developing an aesthetic which recognizes the visual impact of typographic choices. Students who complete this course will gain a further understanding of the principles of design and learn specific uses of design in advertising, corporate identity design, Web design, and interactive media.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: ART 035 or equivalent knowledge of Graphic Design.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-039 - Introduction to Digital Video Units: 3**

This class focuses on the techniques of conceptualizing and making short films using industry standard digital video software. Students will use some of their own imagery as well as Internet resources to create professional pieces of video work. The class will help students to develop their individual creativity while working around the typical financial and technical constraints of a beginning artist. Students will be introduced to the history of film and video art, copyright policies and web publishing.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Basic Computer Skills

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-041 - Digital Filmmaking: Camera Techniques, Lighting and Sound Units: 3**

This is a hands-on course covering the basic techniques of digital filmmaking, camera techniques, lighting and sound. Topics will include the theory and practice of concept and design, camera techniques, lighting, sound recording and other fundamentals of producing a short film in the digital video medium. Students will shoot and produce their own footage and record their own sound. Students will engage in various filming exercises, as well as in group and individual projects. In addition, students will be required to complete homework assignments outside of class time.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-042 - Beginning Sculpture I Units: 3**

This course is an introduction to sculptural processes. Various sculptural materials will be explored, such as clay (non-firing), plaster, wood, stone, silicone, beeswax, and metal. A survey of sculptural form, both historic and contemporary, parallels individual student work. Emphasis is on craftsmanship and technique, visual investigation, and idea development.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ART-043 - Sculpture II Units: 3**

This is a studio/lecture course in sculptural processes that furthers the techniques and concepts learned in Art 042. Increased skill in various sculptural materials is emphasized with the goal for students to employ sculpture as a means of personal expression, developing an individual visual vocabulary. The types and meanings of sculpture in contemporary society will be examined.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O

Prerequisite: ART 042 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: 3  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-055A - Life Drawing I Units: 3**

In this course, students will draw from the live human figure. Fundamentals of life drawing will be covered, including drawing shape, volume, mass, proportion, sub-structure, foreshortening and the basics of human anatomy. Techniques include contour, gesture, surface modeling, hatching, cross-hatching and tonal shading using a variety of drawing media.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: L

Prerequisite: ART 024 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-055B - Life Drawing II Units: 3**

This course is a continuation of drawing the human figure, with emphasis on continued practice of technique while developing a personal artistic direction. Topics covered will include development of full-page composition, use of multiple figures, integration of color, theme development, and refinement of personal style. Traditional and non-traditional approaches will be explored.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: L

Prerequisite: ART 055A with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-060 - Beginning Painting I Units: 3**

Beginning Painting is an introductory studio course in acrylic and/or oil painting media. Students will explore a variety of methods of approach, learn various techniques, test the effects of different color schemes, become familiar with tools and materials of the craft, and develop skills related to painting through illustrated lectures, demonstrations, and studio practice.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O

Prerequisite: ART 014 and ART 024, both with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-061 - Beginning Painting II Units: 3**

ART 061 expands the knowledge and technologies gained in ART 060, emphasizing development of themes and approaches in painting. Conceptual issues will be introduced. Students will experiment with media, content and technique to further explore and develop their aesthetic style.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O

Prerequisite: ART 060 with C or better, or equivalent

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-066 - Introduction to Metalsmithing Units: 3**

This course is an introduction to techniques and processes for the production of small metal sculpture and jewelry metal arts in non-ferrous and precious metals. This course includes an examination of the history and contemporary practices of small metal arts and jewelry with a global cultural perspective.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: O

Recommended: ART 013

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-076A - Art and Design Portfolio Preparation Units: 3**

This course focuses on the development of an effective portfolio in the student's area of concentration. The emphasis will be on researching the student's chosen field of art or design, creating a portfolio that showcases the student's unique styles and strengths, and identifying areas that need further development.

Lecture Hours: 2 Lab Hours: 4 Repeatable: No Grading: L

Prerequisite: ART 012, ART 013 and ART 035; all with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ART-090 - Art Appreciation Units: 3**

This is an introductory course to the appreciation of the visual arts drawn from a wide variety of media, cultures and time periods. Students will learn to analyze art forms in regards to the elements and principles of art, and will be introduced to various technical procedures and materials, allowing students to make connections regarding these formal attributes and the work's content or meaning. The function and communication of visual arts within societal contexts will also be examined.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 4 Write: 4 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: C1 District GE: C1 IGETC: 3A

**ART-091 - Survey of Art History: Prehistoric Through Gothic Units: 3**

This course is an illustrated survey of Western Art History from the Prehistoric through the Gothic periods. Course content emphasizes painting, sculpture, and architecture from important centers of Western culture, and how art reflects historical, social, political, and religious attitudes of the time. Presentation of the material is through lecture with projected images. Comparative analysis of styles and artists with critical evaluation of aesthetics will be included. Topics include Prehistoric, Egyptian, Greek, Roman, Early Christian, Romanesque, Byzantine, Medieval, and Gothic Art.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**ART-092 - Survey of Art History: Renaissance to the Present Units: 3**

This course is an illustrated survey of Western Art History from the Renaissance through the present. Course content emphasizes painting, sculpture, and architecture from the most important centers of culture, and how art reflects historical, social, political, and religious attitudes of the time. Presentation of the material is through lecture with projected images. Comparative analysis of styles and artists with critical evaluation of aesthetics will be included. Topics include Early to High Renaissance, Mannerism, Baroque, Rococo, Romanticism, Realism, Impressionism, Post Impressionism, Fauvism, Cubism, Abstract Expressionism and Post-Modernism.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**ART-093 - History of Modern Art Units: 3**

This illustrated history of Modern Art will explore a wide range of artworks, including painting, sculpture, design, architecture, and photography, from the mid-19th century to the end of the 20th century. Major schools of artistic expression to be explored include: Impressionism, Nabis, Symbolism, Expressionism, Cubism, Dada, Modernism, Social Realism, Abstract Expressionism, Op, Pop, New Realism, Surrealism, Futurism, Constructivism, and Feminism. Students will learn to evaluate art critically and will gain an understanding of how works of art serve to reflect the social, political, and philosophical ideas of the time.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

## Astronomy

**ASTRO-010 - Introduction to Astronomy Units: 3**

Astronomy 010 is an introductory course in general astronomy. Its topics include the history of astronomy and the development of modern astrophysics, the structure and origin of the solar system and the Milky Way, the birth and death of stars, galaxies, and the search for extraterrestrial life. The scientific method and the fundamental laws of physics are stressed. Special emphasis is placed on recent research in astronomy and the latest discoveries and tools used in modern astronomy. Astronomy 010 satisfies the requirement for a general education course in Physical Science without lab.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: 3 units of MATH 111 with P grade or placement based on math assessment

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1      District GE: B1      IGETC: 5A

**ASTRO-010L - Introductory Astronomy Lab Units: 1**

ASTRO 010L is an introductory laboratory course in Astronomy designed for non-science majors, that includes substantial work at the Montgomery Hill Observatory with state of the art telescopes and cameras. Students will identify constellations and asterisms, measure the apparent motion of planets and stars, investigate the geology of terrestrial objects throughout the solar system, and discuss the dramatic chemical differences in solar system planets and their moons. This course will cover the different stages of stellar evolution, making use of computer simulations to illustrate changes in size and energy output of stars as they age. Course work will conclude with explorations of large scale structures such as galaxies, clusters of galaxies, and the expanding Universe. Acceptable as a CSU lab science requirement only if student has completed ASTRO 010, or ASTRO 014, or ASTRO 016 previously or concurrently.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: ASTRO 010, or ASTRO 014, or ASTRO 016, minimum grade C, or concurrent enrollment

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B3      District GE: B3      IGETC: 5C

**ASTRO-014 - Solar System Astronomy Units: 3**

Solar System Astronomy is an introductory course focusing on the main physical processes governing the solar system formation and its evolution. It introduces the scientific methodology adopted by astronomers to establish self consistent models of celestial processes. It highlights the latest achievements in space exploration on planets and their moons, and other minor bodies such as asteroids, comets, and dwarf planets. Special consideration is given to current research focusing on origins of life and the search for evidence of extraterrestrial life, past or present.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1      District GE: B1      IGETC: 5A

**ASTRO-016 - Stars, Galaxies, and the Origin of the Universe Units: 3**

Stars and Galaxies is an introductory course for non-science majors highlighting the following subjects: stellar properties, stellar evolution, shapes of galaxies, and structure of the universe in large scale. It presents the main phases of stellar evolution, the stellar population in different sections of Milky Way Galaxy, the distribution of galaxies within clusters, and Hubble flow. Additional topics include a brief history of the Big Bang Theory, the presence of dark matter in the galactic halo, and dark energy. This course satisfies the requirement of a general education course in Physical Science without a laboratory component.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1      District GE: B1      IGETC: 5A

## Athletics

**ATH-058 - Sports Conditioning for Competitive Athletes Units: 1**

This sports conditioning course is designed for the competitive athletes. The class involves Components of Fitness, Sports Conditioning, Training Protocols and Nutritional information for pre and post season.

Lecture Hours: None      Lab Hours: 3      Repeatable: 3      Grading: L

Recommended: Enrollment in an intercollegiate athletic course

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**ATH-064 - Competitive Soccer Units: 2**

This is an athletic soccer course that provides advanced instruction in the techniques, tactics, and strategies associated with soccer.

Lecture Hours: None      Lab Hours: 6      Repeatable: 3      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

***Athletics Intercollegiate Men*****ATHM-060 - Intercollegiate Soccer Units: 3**

This is a physical education soccer activities course with an emphasis on intercollegiate competition in team sports. The course involves physical conditioning, skill development, team work development, development of competition strategies, and intercollegiate league play.

Lecture Hours: None      Lab Hours: 9      Repeatable: No      Grading: O

Recommended: Competitive selection process

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Athletics Intercollegiate Women*****ATHW-060 - Intercollegiate Soccer Units: 3**

This is a physical education soccer activities course with an emphasis on intercollegiate competition in team sports. The course involves physical conditioning, skill development, team work development, development of competition strategies, and intercollegiate league play.

Lecture Hours: None      Lab Hours: 9      Repeatable: No      Grading: O

Recommended: Competitive selection process

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ATHW-061 - Intercollegiate Volleyball Units: 3**

This is a physical education volleyball activity course with an emphasis on intercollegiate competition in team sports. The course involves physical conditioning, skill development, team work development, development of competition strategies, and intercollegiate league play.

Lecture Hours: None      Lab Hours: 9      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Automotive Technology*****AUTO-102 - Automotive Systems Units: 3.5**

This course will introduce students to the automotive industry and provide a basic overview of the eight areas of certification as specified by the National Institute for Automotive Service Excellence (ASE) and the National Automotive Technicians Education Foundation (NATEF). The course will examine the purpose, function, and operation of the major systems common to most automobiles. In addition, students will learn methodologies for inspecting and providing basic maintenance common to most vehicles. Students will work with the tools and equipment used for inspection, maintenance, repair, and diagnostic work.

Lecture Hours: 2      Lab Hours: 4.5      Repeatable: No      Grading: L  
 Credit by Exam: Yes

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: None      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-103 - Light Line Technician Units: 2**

This course will prepare students for entry level employment in the automotive field as a first-level maintenance technician. The course will also introduce students to the Express Service training that the American Honda Program provides. Each student is assigned various vehicles and performs routine maintenance, inspection, and basic performance testing tasks that are commonly performed at automobile dealerships. In addition to gaining hands-on experience, successful students will build teamwork and cooperative skills, improve their time management practices, and develop sound workmanship values.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better or equivalent

*Advisory Level:*      Read: 2      Write: 2      Math: 1  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-105 - Suspension, Steering, and Alignment Units: 3**

This course will cover, in both theory and practice, the proper diagnosis and repair of manual and power steering systems, steering columns, air bags, and other steering components. Also discussed are McPherson Strut and SLA suspension systems including ball joints, knuckle assemblies, bushings, shocks, coils, torsion bars, pneumatic springs, and active suspension systems, computerized four wheel and thrust alignment procedures including caster, camber, toe, included angle, setback, scrub radius, TOT, drift or pull correction, and cradle adjustment.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103 and AUTO 172

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-106 - Automotive Brake Systems Units: 2**

This course is a study of mechanical and hydraulic brake components and systems. Emphasis will be on system operation, adjustment, testing, replacement, and repair procedures. Drum, disc, power assist, and ABS brake systems will also be studied.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102

Recommended: AUTO 172

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-107 - Valve Train****Units: 2**

This is an advanced course that studies the latest valve train and cylinder head designs. Precision instruments and test equipment are utilized to diagnose and adjust modern valve train components. Valve train repairs and service are emphasized using valve and seat resurfacing techniques and several types of valve timing methods. This course prepares students to become proficient at valve train service, repair, and diagnostics.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 and AUTO 171, with a C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-108 - Engine Short Block****Units: 2**

This is an advanced course that studies the latest cylinder block component designs. Precision instruments and test equipment are utilized to diagnose and test modern automotive engines. Cylinder block repairs and service are emphasized using machine shop equipment and techniques, as they would be used in industry. This course prepares its students to pass the national ASE tests "Cylinder Block Specialist" (M-2) and "Engine Assembly" (M-3).

Lecture Hours: 1      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: AUTO 102 and AUTO 171, with C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 1  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-109 - Engine Blueprint****Units: 2**

This is a high performance engine-machining course with theory and practice utilizing modern machine shop equipment. Comparisons will be made between engine blueprinting practices and production rebuilding techniques. This class will cover aftermarket upgrades in engine technology and how they affect engine life and performance.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-111 - Auto Welding****Units: 1**

This course will introduce the student to the oxygen acetylene apparatus and its use for welding, brazing, cutting, and heating as well as to the different types of metal that are weldable. Proper use and care of equipment and safety procedures and precautions are also covered.

Lecture Hours: 0.5      Lab Hours: 1.5      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-118 - Fuel Systems/Emission Controls****Units: 3**

This course covers automotive fuel systems, including: tanks, pumps, lines, filters, idle and vacuum control devices, electronic fuel injection, and emission control devices. Emphasis will be placed on combustion chemistry and emission testing procedures, and the diagnosis and repair of fuel and emission control system components. Students will diagnose and repair hard start, no-start, poor performance, and emission failures on a range of vehicles using the latest test equipment and methods. This course provides significant preparation and experience for those pursuing licensing as CA emission technicians.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with a C or better.

Recommended: AUTO 170

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-119 - Introduction to Engine Performance****Units: 2.5**

This course is part of the Automotive Basic Skills track emphasizing engine systems relevant to performance and driveability. Classroom theory, engine analyzers and test equipment will be utilized to diagnose modern automobile engine systems. Engine diagnostic strategies will be performed in the lab as they would be in industry. In addition to gaining hands-on experience, successful students will build teamwork and cooperative skills, improve their time management practices, and develop sound workmanship values.

Lecture Hours: 2      Lab Hours: 2      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with a C or better, or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: None      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-120 - Automatic Transmission Systems****Units: 2.5**

This course will prepare students to diagnose and repair front and rear wheel drive automatic transmission systems. Topics include: stall and pressure testing, torque converters, planetary, CVT, and helical gear systems, overhaul practices, valve body repair, and on-car service techniques in both theory and practical application. Computerized powertrain diagnosis and repair will also be explored. Additional electronic transmission diagnosis and repair techniques are studied in Auto 174, Body Chassis Electronics. Both courses are recommended preparation for the ASE Automatic Transmission Exam.

Lecture Hours: 1.5      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103 and AUTO 172

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-121 - Manual Transmission and Drivetrain Systems****Units: 2**

This course will prepare students to diagnose and repair front and rear wheel drive manual transmission systems, clutches, drive lines, differentials, and CV axles. Planetary, helical, hypoid, bevel, and straight cut gear systems will be studied including ratio calculation and torque multiplication. Overhaul practices, including teardown, measurement, inspection, repair, and reassembly will be covered. Four wheel drive systems such as automatic locking hubs, transfer cases, and electronic drivetrain systems are also studied to prepare students for the ASE Manual Transmission Exam.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103 and AUTO 172

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None



**AUTO-122 - Advanced Electrical Systems****Units: 3**

This is an advanced automotive electrical course stressing diagram-based diagnostic methods. Students will design and build functioning circuits and systems, as well as compute and measure all aspects of performance. Students will learn to diagnose and repair a wide variety of circuit, system, and component faults in general electrical, starting, charging, lighting, instrumentation, accessory, climate control, audio, navigation, and SRS systems. Analytical skills and use of specialized test equipment will be stressed to provide students with excellent and highly marketable diagnostic abilities.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: AUTO 170 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-125 - Automotive Electronics****Units: 2**

This course explores the application of electronic components and systems within a modern vehicle. Students will learn basic semiconductor theory, and operation and testing of a wide variety of input and output devices. Multiplex (vehicle intranet) systems, serial communications, and diagnostic practices will also be covered.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Prerequisite: AUTO 170 with C or better

Recommended: AUTO 118, AUTO 122, AUTO 127, AUTO 129

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-127 - Ignition Systems****Units: 3**

This course covers the theory, diagnosis and repair of modern automotive DI and EI ignition systems. Topics include: ignition system function, combustion requirements, primary system triggering, switching components and operation. Included are secondary ignition components and operation, ignition timing devices, electronic spark timing function and strategy, as well as distributorless ignition systems i.e. Waste Spark and Coil-on-plug. System testing methods, fault isolation techniques, DSO, GDMM, Oscilloscope testing, waveform interpretation, as well as maintenance/driveability fault corrections are also included.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 170

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-129 - DSO, GDMM, Scan Tool Diagnosis****Units: 1.5**

This laboratory oriented course explores the many aspects of advanced engine performance testing. Students will develop proficiency using digital storage oscilloscopes, current clamps, graphing multimeters, generic and manufacturer specified scan tools, and other diagnostic equipment. Emphasis will be placed on waveform and PID interpretation, and the effects erroneous signals/information can have on vehicle performance.

Lecture Hours: 0.5      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 170 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-132 - Individualized Skills Training Lab****Units: 1.5**

This course allows Automotive Students to complete Honda Individualized Skills Training Modules not covered in regular classes. Topics include brakes, engine repair, suspension, steering, electrical, driveability, transmission, drivetrain, fuel systems, and air conditioning.

Lecture Hours: None      Lab Hours: 4.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102

Recommended: AUTO 103, AUTO 119, AUTO 171

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-132A - Honda Individualized Skills Training Session A****Units: 1.5**

This course allows automotive students to complete Honda Individualized Skills Training Modules not covered in regular classes. Topics include engine repair and scanner usage.

Lecture Hours: None      Lab Hours: 4.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103, AUTO 119, AUTO 171

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-132B - Honda Individualized Skills Training (IST) Session B****Units: 1.5**

This course allows automotive students to complete Honda Individualized Skills Session B training modules not covered in regular classes. Topics include advanced electrical and fuel systems.

Lecture Hours: None      Lab Hours: 4.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103, AUTO 119, AUTO 170

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-132C - Honda Individualized Skills Training (IST) Session C****Units: 1.5**

This course allows automotive students to complete Honda Individualized Skills Session C training modules not covered in regular classes. Topics include drivability, multiplexing, and advanced scanner diagnostics.

Lecture Hours: None      Lab Hours: 4.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Recommended: AUTO 103, AUTO 119, AUTO 170

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-133 - Computerized Engine Management Units: 2.5**

This is an advanced automotive course covering electronic powertrain and vehicle management. The systems covered include fuel, ignition, emissions, idle, cruise control, transmission, throttle control, variable valve timing, collision mitigation, variable valve timing, vehicle stability assist, lane departure warning, and interrelated vehicle systems. Analytical skills and use of specialized test equipment will be stressed to provide students with excellent and highly marketable diagnostic abilities.

Lecture Hours: 2      Lab Hours: 2      Repeatable: No      Grading: L

Prerequisite: AUTO 125 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-135 - Air Conditioning Systems Units: 2**

This course will prepare students to diagnose and repair modern heating ventilation and air conditioning systems. Topics studied include systems inspection, diagnosis, and repair, leak testing, performance testing, mode control, refrigerant identification, recovery, flushing, evacuation, recharging, and safe handling procedures. Students will also learn to diagnose component malfunctions and using various refrigerant types. Auto 135 and 174 prepare students for the ASE Air Conditioning exam.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102, with C or better

Recommended: AUTO 103

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-138 - Occupational Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in automotive technology course(s). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 1.81      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-141 - Clean Air Car Course Units: 5**

This course covers details of the California Smog Inspection Program. Successful completion is required for technicians wishing any level of California smog license. It covers rules, regulations, licenses, consumer rights, inspection procedures, equipment usage, safety, diagnostic techniques, failure diagnosis and periodic updates of new technology. Incorporates portions of previous BAR Updates for OBD2, 2003, 2005, and 2007.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-145 - Enhanced Emission Diagnostics Level 2 Units: 2**

This course covers California Smog inspections and testing. The course meets State of California BAR licensing requirements for Inspector licensing. Students will become familiar with inspection procedures and system analyzers, including the Test Analyzer Systems as required by current regulations. Instruction will include oxygen sensor graphing, five gas emissions, baseline techniques, loaded mode testing, NOx inspections, diagnosis, and catalytic converter diagnosis and testing.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: AUTO 141 with C or better or hold current or past Calif. Smog Technician License.

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-147D - BAR 2011 Update Training Units: 1**

California Bureau of Auto Repair (BAR) Update Training for 2011, necessary for new Smog Licenses or biannual renewals. The course covers latest BAR Updates, review of proper vehicular testing procedures, catalytic converter diagnosis, use of BAR references to determine after-market parts suitability.

Lecture Hours: 1      Lab Hours: 0.057      Repeatable: No      Grading: O

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-147E - BAR Update Training Units: 1**

California Bureau of Auto Repair (BAR) Update Training effective Jan 1 2013, necessary for new Smog Licenses or biannual renewals. An In-depth study of evaporative emissions systems used on OBD II vehicles will be provided. Topics include the operation, diagnosis, and repair of vacuum decay, leak detection pumps, natural vacuum leak detection, and on-board refueling. The course covers latest BAR Updates to licensing, technician and shop scoring (STAR), Ethics and OIS (OBD only testing).

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-170 - Electrical Systems Units: 3**

This course introduces students and entry level automotive technicians to the automotive electrical system. The course covers electrical theory, magnetism, Ohm's law, series and parallel circuits and system dynamics. Students learn to calculate and measure voltage, resistance and current in theoretical and live circuits, build and test working models of typical automotive electrical systems using table top components and industry specific simulators, and practice diagnosis and repair procedures on a variety of vehicles. Students will also develop an understanding of modern electrical test equipment, such as DMMs, GDMMs, and DSO's, and industry standard troubleshooting and repair procedures.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-171 - Engine Systems****Units: 2.5**

This is an intermediate level course that covers engine theory and repair procedures. This is a unique class, wherein students will start an engine in the first class session. Throughout the course students will complete disassemble and study each component and the system it relates to. During the last few class meetings students will have the engine properly assembled, running, and thoroughly tested. This course prepares students to pass the National Automotive Service Excellence ASE "Engine Repair" test.

Lecture Hours: 2      Lab Hours: 1.5      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-172 - Chassis and Drivetrain Systems****Units: 2.5**

This intermediate level course will introduce students to the service and repair procedures of drive-train systems, brakes, clutches, steering, suspension, alignment, and related measurement practices. Auto 172 is designed to prepare students for the chassis drive-train track and stresses inspection and routine maintenance services of under-car systems such as CV axles, brake friction components, universal joints, clutch systems, and transmissions. Satisfactory completion of this course is required for all Automotive degree options.

Lecture Hours: 2      Lab Hours: 2      Repeatable: No      Grading: L

Prerequisite: AUTO 102, with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-173 - Automotive Service Operations****Units: 2**

This course will provide overview information about careers in Automotive Technology. Preparation for "on the job" experience will include presentations and discussions about professionalism, work ethics, diplomacy, consumerism, safety, hazardous wastes, tools and equipment, as well as employee, employer, and customer relations.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-174 - Body & Chassis Electronics****Units: 2**

This course provides students with the marketable skills needed for the diagnosis and repair of modern electronic body-chassis control systems. It is designed to complement Auto 105, 106, 120, and 135 Chassis/Drivetrain classes by studying ABS, electronically controlled steering, suspension, AC, and transmission systems. Students will be using state-of-the-art equipment such as: lab scopes, ETMs, scanners, DVOMs, and other related resources. Students will apply knowledge of Ohm's Law, digital logic, parasitic load testing, short/open location, communication protocols, and other technical resources.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 with C or better

Corequisite: AUTO 170

Recommended: AUTO 172, AUTO 105, AUTO 106

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-175 - Welding and Fabrication****Units: 2**

This course will introduce students to the hands-on skills needed to plan and fabricate components used in light truck or automotive repair or modification. Specialized tools such as tubing benders, MIG welders, chop saws, and fabrication equipment, as well as a variety of specialized hand tools, will be covered. In addition to gaining hands-on experience, successful students will build teamwork and cooperative skills, improve time management practices, and develop sound workmanship values.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Project fabrication requires basic math and reading/writing comprehension.

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-181A - Introduction to Alternative Fuel and Hybrid/Electric Vehicles****Units: 2**

This course will examine a variety of alternative fuels and propulsion systems used in modern automotive vehicles. The advantages and limitations of alternative fuels used in internal combustion engines (ICE) will be discussed. The topics on alternative propulsion systems will include the basic theory of operation, construction, and safety. The unique dangers surrounding alternative fuel and propulsion vehicles will be explored, and how to minimize the risks. This course will also cover what is needed to operate safely and effectively around these vehicles. The course includes a quick guide comparison chart of the different hybrid electric, plug-in hybrid, battery electric, and CNG automobiles.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Prerequisite: AUTO 102, with C or better or equivalent industry experience

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-181B - Hybrid Electric Vehicle Maintenance and Repair****Units: 3**

This is an advanced course that provides an in-depth study of the technology, maintenance, and repair of hybrid, plug-in, and all electric light duty passenger vehicles. Basic diagnostic, repair, and maintenance procedures of the unique systems associated with hybrid and electric vehicles will be discussed and practiced. Special tools and diagnostic equipment will be used during the laboratory exercises.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 102 and AUTO 181A, both with C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-202 - Bugged Vehicle Diagnosis****Units: 1.5**

This lab oriented course allows automotive technology students to utilize their previous training in electrical and powertrain performance courses to perform diagnosis of a wide variety of simulated and actual vehicle faults under real-world conditions. Students will punch in and out on a time card, work from a repair order, and bid diagnostic/repair time and needed repairs. Students will troubleshoot and repair faults in starting, charging, ignition, lighting, accessory, safety, instrumentation, heating and ventilation, fuel, emission control, powertrain control, navigation, and telematics systems.

Lecture Hours: 0.5      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: AUTO 170, and either AUTO 119 or (AUTO 118 and AUTO 127)

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**AUTO-501 - English for Automotive Technology Units: None**

This course is ideal for students who want to understand the unique terminology commonly used in the automotive industry. This course will improve reading comprehension of typical automotive technical manuals and text books. Students will learn how to prepare work orders, repair documents, and common correspondence used in the automotive industry. This is a stand-alone course designed to improve the reading and writing skills of the automotive professional.

Lecture Hours: 5.5 Lab Hours: None Repeatable: Yes Grading: N

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
Transfer Status: None Degree Applicable: NC  
CSU GE: None District GE: None IGETC: None

**Biology**
**BIOL-004A - General Principles and Cell Biology Units: 5**

BIOL-004A is the first course in a two term majors-sequence for students preparing for careers in the sciences, science education, or medicine. This lecture and laboratory course emphasizes the nature of science and the scientific method, fundamental principles and theories in biology at the molecular and cellular level. Topics will include biological chemistry, cell structure and function, bioenergetics, respiration, photosynthesis, cell reproduction, cell communication and regulation, genetics, microevolution, and laboratory techniques and experience. Field trips may be required.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: MATH 013 and CHEM 001A; both with C or better

Recommended: Recently completed biology lecture and lab course with a grade of B or better in high school or college

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B2,B3 District GE: B2,B3 IGETC: 5B,5C

**BIOL-004B - Organismal Biology and Biodiversity Units: 5**

Biology 004B is the second course in a two semester majors-level sequence for students preparing for careers in the sciences, science education, or medicine. This lecture and laboratory course emphasizes the form and function, evolution, and biodiversity of unicellular and multicellular organisms. Topics include protists, fungi, plants, and animals including the phylogenetic relationships among major taxa, macroevolution and Earth history, ecology, and adaptation. Science, the scientific method, and laboratory techniques are also covered. Field trips may be required.

Lecture Hours: 3 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: BIOL 004A with C or better or equivalent

*Advisory Level:* Read: 4 Write: 4 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B2,B3 District GE: B2,B3 IGETC: 5B,5C

**BIOL-020 - Human Biology Units: 4**

This course introduces students to the form and function of the human body. BIOL-020 includes an overview of atoms and molecules, acids and bases, movement in solutions, important classes of biological molecules, the cell, human genetics, biotechnology, and issues in human ecology. Emphasis is on the basic anatomy and physiology of the body's major organ systems. The course is tailored for non-science majors and meets the General Education requirement for life science with a lab.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: 2  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B2,B3 District GE: B2,B3 IGETC: 5B,5C

**BIOL-021 - General Biology Units: 4**

This is an introductory biology course for non-science majors. The course covers the general principles and basic concepts of biology including the characteristics and classification of living systems, cells, metabolism, development, health, reproduction, genetics, evolution and ecology. This course may be a prerequisite, but it is not designed to fulfill requirements of the biology or pre-professional majors.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: 2  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B2,B3 District GE: B2,B3 IGETC: 5B,5C

**BIOL-025 - Forensic Biology Units: 3**

This lecture-only science course is intended for those who have a general interest in the application of biological concepts to forensic science. Students will examine case studies involving crimes to demonstrate how the principles of science are used to analyze physical evidence. Scientific method, mathematical computations, and fundamental principles of physics, chemistry and biology will be applied to various forms of evidence to derive information about a crime scene.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: 3  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: None District GE: None IGETC: None

**BIOL-033 - Biotechnology and Society Units: 3**

This course introduces basic concepts in biology in relation to the field of biotechnology. Topics include prokaryotic and eukaryotic cells, bio-molecules, DNA structure, the genetic code, gene expression, and basic Mendelian genetics. Concepts in biotechnology are presented in a non-technical manner to examine advances in areas such as medicine, agriculture, fuel production, the environment, and diagnostics. Public perception and ethical issues related to biotechnology's impact on society are also considered.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: None District GE: None IGETC: None

**BIOL-061 - Human Heredity Units: 3**

This course discusses the importance of human heredity in our lives. Students will study the rapidly changing areas of human heredity including patterns of inheritance, specific genetic disorders, recombinant DNA and other genetic-based biotechnologies, the role of genetic counseling and genetic tests, reproductive therapies, and bioethics. This is a CSU/UC transferable general education life science course suitable for non-majors.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: 2  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B2 District GE: B2 IGETC: 5B

**BIOL-062 - Plants and Human Welfare****Units: 3**

Students are introduced to the world of plants and their ecological importance to humans. Topics include the impact of plants on development of civilizations; the need for conservation; and the role of plants in the total environment. Class meetings may be held at alternative off campus sites.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2      District GE: B2      IGETC: 5B

**BIOL-063 - Ecology****Units: 3**

This course introduces students to the science of ecology, the branch of biology that studies the abundance and distribution of plants and animals and their interrelationships with the environment. Topics covered include the intersection of evolution and ecology, population biology, community organization, ecosystem function, biodiversity, preservation and conservation, and human ecology.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2      District GE: B2      IGETC: 5B

**BIOL-064 - Marine Biology****Units: 4**

BIOL-64 is a lecture and laboratory course introducing students to the study of marine life. The course will cover physical and biological aspects of life in the sea including marine geology, physical oceanography, marine ecology, a comparative study of major marine taxa, and human exploitation and oceanic history. Special topics and required field trips to local marine habitats are an integral part of the course.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2,B3      District GE: B2,B3      IGETC: 5B,5C

**BIOL-065 - Wildlife Biology****Units: 3**

A General Biology course designed for non-science majors and carrying elective science transfer credit. Emphasis is on wildlife, and its relationship to ecological succession and conservation, energy, mass, and to ecological crises resulting from human exploitation and the explosion in human population. Field trips may be required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: A general science course at the high school level.

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2      District GE: B2      IGETC: 5B

**BIOL-071 - Human Anatomy****Units: 5**

This course covers the structure of the human body including identifying parts, understanding interrelationships, and making clinical applications. Laboratory activity includes the study of models, dissection of a human cadaver and other selected mammalian organs, and use of the microscope to study different cell types and major tissue types. This course is primarily intended for nursing, OT, PT, RT, Chiropractic, and other health-related majors.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: BIOL 021, with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2,B3      District GE: B2,B3      IGETC: 5B,5C

**BIOL-072 - Human Physiology****Units: 5**

Students are introduced to cellular physiology and metabolism. Students study the physiological processes of the human body systems including nervous, endocrine, muscular, urinary, respiratory, sensory, digestive, cardiovascular and reproductive. Other topics include disease and the loss of homeostasis in the body. This course is designed for college degrees in nursing, physical and occupational therapy, and certain science and preprofessional majors.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: BIOL 071 and (CHEM 001A or CHEM 015 or CHEM 030A) and MATH 013; all with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2,B3      District GE: B2,B3      IGETC: 5B,5C

**BIOL-074 - General Microbiology****Units: 5**

General Microbiology covers the structure and activities of microorganisms, including bacteria, viruses, protozoa, fungi, helminths, and algae. This course also covers principles of microbial control, metabolism, environmental microorganism genetics, genetic engineering, disease, modes of infection, and immunity. Emphasis is on aseptic laboratory technique, and the application of microbiology to human welfare.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: (CHEM 001A or CHEM 015 or CHEM 030A) and (BIOL 004A or BIOL 071 or BIOL 072); all with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B2,B3      District GE: B2,B3      IGETC: 5B,5C

**BIOL-080 - Biology Field Program****Units: 1**

The Biology Field Program introduces students to the human and natural histories of a variety of ecosystems including the California seacoast, coastal and Sierra Nevada ranges, and deserts and canyon lands of the southwest. Emphasis will be given to general ecological principles, the flora and fauna of the areas visited, and the tenets of leave-no-trace. Each offering of the course focuses on one of the above areas, and involves on-campus lectures and the equivalent of one week in the field. Participation in the course requires camping, some hiking, and automobile travel. This course may be repeated for credit up to four times. Additional fees are required.

Lecture Hours: 0.25      Lab Hours: 2.25      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**BIOL-080A - Field Biology - Zion National Park Units: 1**

EVC's field-biology courses introduce students to the human and natural histories of a variety of ecosystems. Biol-080A emphasizes the biodiversity and geology of Zion National Park and its unique mix of desert and riparian ecosystems. The course covers general ecological principles, common flora and fauna of Zion National Park, the geologic history of the Kayenta formation, and human history in the area. The course entails on-campus lectures and the equivalent of one week in the field. Course participation requires camping, hiking, and automobile travel. Additional fees are required.

Lecture Hours: 0.44 Lab Hours: 2.11 Repeatable: No Grading: O

Advisory Level: Read: 3 Write: 3 Math: 2  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

***Building Information Modeling*****BIM-120 - Construction, Means, Methods, and Materials Units: 3**

This course is an introduction to construction management, as it relates to understanding the multi-faceted roles and responsibilities that are typically shared by project team members during the course of a construction project. The material is presented through lecture, discussion, mixed media and real-world examples. Innovations that are changing the industry as well as building for a sustainable future are also covered.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 2  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-121 - Virtual Design and Construction Workflow Units: 3**

This course will introduce students to the Virtual Design and Construction Workflow processes and procedures, and expose them to the software tools required.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 1  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-122 - Managing Construction Coordination Meetings Units: 3**

This course will cover the most commonly used software tools for managing construction coordination meetings. The software tools will be used in conjunction with "Best in Class" Clash Detection and Coordination meeting processes that enable rapid decision making abilities to keep projects on schedule, as well as maintain budgets and within the defined quality requirements of the projects.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 1  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-123 - Revit Fundamentals Units: 3**

This course will cover the fundamentals of Autodesk Revit Architecture in a lecture/lab format with hands-on learning. Students will learn how to: set up a new building information model; create a basic floor plan; work with basic architectural elements (walls, doors, windows, floors, ceilings, roofs, curtain walls, stairs and railings); create sections, elevations and callouts views; add annotations including dimensions, text, tags, schedules and legends; and share designs by working in teams, creating architectural visualization renderings and plotting finished drawings. Students are also introduced to the basics of creating simple families.

Lecture Hours: 1 Lab Hours: 6 Repeatable: No Grading: L

Recommended: Basic AutoCAD or equivalent skills

Advisory Level: Read: 3 Write: 3 Math: 2  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-124 - Revit Advanced Training Units: 3**

This course is focused specifically on providing an immediate to advanced level of training on Revit Architecture. The skills learned during this class are for experienced Revit users and are designed to help experienced users take the next step in advancing their current knowledge of Revit Architecture. Students will learn to create architectural visualization renderings, use filters, section boxes, design options and phasing to present various display ideas and solutions. They will also create advanced families, develop advanced schedules using project and shared parameters and conceptual massing.

Lecture Hours: 1 Lab Hours: 6 Repeatable: No Grading: L

Prerequisite: BIM 123 with a C or better

Advisory Level: Read: 3 Write: 3 Math: 3  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-125 - Planning and Managing Construction Projects with 4D CAD and Simulations Units: 3**

Building Information Modeling (BIM) integrates 3D drawings and 4D animations to dramatically improve the communication, coordination, and planning of construction projects, while reducing risks, errors, and costs. BIM is an in-depth resource that shows architects and building professionals how to capitalize on BIM concepts, tools, and techniques for their own building projects.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 1  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIM-138 - BIM Work Experience Units: 1 - 8**

Occupational work experience is designed for students who work or volunteer in the field related to their career major. Students are required to provide evidence that they are enrolled in BIM course(s). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 1.81 Repeatable: 15 Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

***Business*****BUS-004 - Business Plan Development Units: 3**

Students will learn how to develop a business plan for the creation of a business, including the organizing, marketing, operating and financing of a business. Risk analysis will be covered also.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-006 - Introduction to Small Business Management Units: 3**

This course explores the complex process of entrepreneurship from identifying a viable business idea, to creating a successful start-up, including planning for growth and continuing innovation, as well as avoiding pitfalls while launching an idea into a business. This course provides a good introduction for individuals seeking to create and manage a start-up business.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-009 - Introduction to Entrepreneurship Units: 3**

Students will study the principles of entrepreneurship, and focus on the entrepreneurial process, opportunity recognition, entry strategies, market opportunities, the development of a successful business plan, and making financial projections. The material is presented through methodologies of lecture, discussion, current events, Internet research, case studies, and computerized assignments.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-060 - Fundamentals of Business Statistics Units: 3**

This course introduces statistics with an emphasis on business applications. Students will learn how to collect, analyze, interpret, and present numerical data for the purpose of making more effective decisions. Topics include: collection and presentation of data, measures of central value and spread, probability, sampling and the sampling distribution of the sample average, estimation via confidence intervals, hypothesis testing, and regression and correlation. This course requires the use of quantitative skills acquired in intermediate algebra and finite math.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: 2A

**BUS-060L - Statistics Laboratory Units: 0.5 - 1**

BUS 060L is a recommended corequisite course of BUS 060, Fundamentals of Business Statistics. This course provides hands-on computer experience using software to augment and demonstrate concepts presented in the BUS 060 class.

Lecture Hours: None      Lab Hours: 1.5 - 3      Repeatable: No      Grading: O

Corequisite: BUS 060

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-065 - Concepts of Management Units: 3**

This course covers the principles and concepts of management. It includes planning, organizing, coordinating and controlling in the firm; social responsibility and ethics in business, decision-making, communications, and budgetary control.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-066 - Retail Store Management Units: 3**

Retail Management introduces students to the principles and practices of retail store operations. All major topics will be covered: consumers, site location, designing, staffing, and organizing, developing the retail offering and getting merchandise into the store, developing and controlling the merchandise plan, setting and adjusting retail prices, promotional activities, the importance of environmental influences, financial statements and operations control.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-069 - Human Resources Management Units: 3**

This course is an introduction to the management of human resources. Understanding the impact and accountability to the organization in terms of human resource activities, global human resource strategies, social and organizational realities, legal implications affecting people at work, union/nonunion practices, comparable work, employee compensation and benefits, and employee rights will be covered and emphasized.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: BUS 082 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-071 - Legal Environment of Business Units: 3**

Students study laws and regulations affecting business decisions including legal concepts and cases in the areas of ethics, business torts, contracts, consumer and merchant sales, competition, environment, agency, employment and business organizations.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-082 - Introduction to Business Units: 3**

Students are introduced to the business functions and practices as they have developed over time in the U.S. Students will be introduced to topics such as organizational structure and behavior, management, marketing, finance and accounting, operations and information systems, and ethical responsibilities of corporations. Special emphasis will be placed on the emergence of global business, its impact and the significance of small businesses.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-084 - Introduction to Marketing Principles Units: 3**

This course provides students with an introduction to the theory and practice of marketing as well as the integration of marketing activities of a business. Students will study about marketing research, management of products and services, pricing policies and strategies, channels of distribution, physical distribution and logistics management, promotion strategies and tactics, government regulations, and marketing ethics.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-098 - Directed Study in Business Units: 0.5 - 9**

Individual or small groups of students who would benefit from Independent Study under the direction of faculty members in specific or related disciplines may develop individualized learning contracts designed to enhance their individual instructional programs. The students and the faculty member in consultation with the Division Dean will determine appropriate learning objectives and activities as well as the number of units to be earned. Instructions and the Learning Contract forms are available in the Division office. Repeatable to a maximum of 9 units across all disciplines.

Lecture Hours: None      Lab Hours: 1.5 - 27      Repeatable: 17      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BUS-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**Business Information Systems****BIS-002 - Introduction to Project Management Units: 1**

In this course, you will learn the definition of project management, the context of modern project management, and how to manage projects throughout the five major process groups, to gain commitment, to minimize or eliminate scope creep, to organize, to develop project teams and realistic schedules, and to efficiently close out a project.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-004 - Mastering Microsoft Project Units: 2**

Students will learn about Microsoft Project® as a critical tool for project management planning, tracking, decision-support, and project office support. The course content is process centric, not feature focused. This enables students to quickly and effectively apply the tool to their specific projects. This course presents practical concepts and techniques for using a commonly available, but often-misused, management tool. No software programming experience is required.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: L

Recommended: BIS 102

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-005 - Project Integration & Schedule Management Units: 2**

The primary objective of this course is to equip students with project integration and risk management skills, including how to plan and organize projects, elicit and manage product requirements, and manage project risks.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: L

Recommended: BIS 002

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-006 - Strategic Thinking Units: 1.5**

This course is designed to teach participants how to think beyond traditional project management processes by considering the overall strategies and tactics needed to meet project goals and objectives. A specific "4C" (Customer, Corporation, Competitor, Co-worker) approach will be taken to show how these concepts can be applied in a practical manner.

Lecture Hours: 1.5      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-007 - Business Writing Skills Units: 3**

Students will review and apply Business English skills for business letter writing. Grammar, word and number usage, punctuation, vocabulary, spelling and other mechanics will be covered. The Internet and technological forms of communication used today will be reviewed.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-009 - Communication & Teamwork in Project Management Units: 2**

This course is designed to equip students with soft skills needed for managing projects—leadership, communications, team organization and development, conflict management, quality management, and negotiating. Case studies and exercises will be used by students to explore vital aspects of project leadership such as the use of participative management to build commitment, leadership styles, organizational cultures and configurations, interpersonal skill development, project staffing, and working with distance-separated teams. Students will also gain valuable skills needed for establishing clear project goals, overcoming communication problems, writing performance reports, and managing agreements.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: BIS 002

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-010 - PMP Examination Preparation Units: 2**

This course is designed to prepare students for the Project Management Institute (PMI) Project Management Professional (PMP®) examination.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: BIS 002

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-011 - Computer Keyboarding Units: 1**

The course will cover keyboarding basics—touch typing, correct keyboarding technique, review of language arts and correct spacing. Students will also acquire a minimum speed of 15 net words per minute on a three-minute timed test. This course is for students with or without experience in keyboarding. Students with keyboarding experience will be able to build their speed to a higher rate.

Lecture Hours: 0.5      Lab Hours: 1.5      Repeatable: No      Grading: O  
 Credit by Exam: Yes

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**BIS-012 - Business Document Production Units: 2**

Students will learn to create and format business documents such as letters, memos, tables, reports, and employment documents. Standard industry requirements will be covered and emphasized. Students will learn how to produce documents that mirror or meet industry requirements. Speed and accuracy will be emphasized. Students will be able to produce an error-free document at the end of the course.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Some keyboarding experience; or beginning keyboarding class

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-016 - Medical Front Office Skills Units: 2**

This course teaches skills that are required in the healthcare office environment such as appointment scheduling, processing medical forms, transcription of medical documents, and handling patients. Students will work with a software application such as Medisoft. Hands-on experience is emphasized for all required tasks.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Prior keyboarding experience; BIS 007

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-017 - Medical Terminology Units: 1**

The medical professions, healthcare settings, and medical forms and documents will be reviewed. Emphasis will be placed on mastering medical terms, abbreviations, spelling rules for component parts, body systems, combining forms, prefixes, and suffixes. Students will learn to use medical terms correctly in medical forms and documents. Students will also learn how to handle patient confidentiality in healthcare offices.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-039 - Professional Image Units: 1**

The importance of image to success in the business world will be discussed. Students will learn how to project a positive and confident image. The appropriate attire for the different working environments will be covered. Etiquette, ethics, and communications that complements a professional image will be emphasized. Students will develop a professional wardrobe for a career.

Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-095 - Microsoft Windows Units: 1**

This course introduces students to the current Microsoft Windows operating system. Students will learn how to navigate and customize Windows and Desktops, the Start Menu and the Taskbar. In addition, security settings/utilities, cloud drives, accessories, file explorer and Edge will be covered. Students will also learn to organize and manage files, and perform security and maintenance tasks to improve workflow and productivity.

Lecture Hours: 0.5 Lab Hours: 1.5 Repeatable: No Grading: O

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-101 - Global Communication in the Workplace Units: 3**

Communications in the business world today will be emphasized--the process, development, and presentation (both written and oral) and how communication is executed. Students will learn to plan, develop, compose, and edit a variety of documents. Social media tools and guidelines for communicating (blogs, Internet forum, media sharing, social networking, virtual reality, etc.) will be discussed. Current letter styles, reports and effective business correspondence will be reviewed. Students will learn about the trends and changes in words and expressions used frequently in the workplace.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: ENGL 104 or ESL 091 and BIS 007; all with C or better or equivalent

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-102 - Microsoft Excel Units: 3**

Introductory and advanced Excel topics will be covered in this course, including formulas, functions, formatting, themes, cell styles, charts, diagrams and general management of worksheets. Advanced topics include conditional formatting, tables, financial functions, lookup functions, what-if analysis, pivot tables/charts, summarization and consolidation of data.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-104 - Microsoft Access Units: 3**

Students will use Microsoft Access to learn basic database concepts by creating and modifying databases, database tables, and table fields. Students will learn about and create relationships between tables. Students will also learn how to develop applications that include queries, forms and reports and demonstrate the use of databases, tables, and fields. This course will also include using Access wizards and database tools, and importing and exporting data.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-106 - Microsoft Word Units: 3**

Students will use Microsoft Word to prepare documents by learning Word functions. Word commands will be shown using the ribbon and backstage view to produce professional-looking documents for the workplace, school and personal communication. Application terminology and procedures will be taught in depth.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

Prerequisite: BIS 011 or type at least 25 words per minute

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-107 - Microsoft PowerPoint Units: 2**

Students will learn presentation techniques and deliver presentations using current MS Office PowerPoint features, including document themes, title and master slides, character and paragraph formatting, graphic elements, backgrounds, SmartArt Diagrams, video and audio clips, charts, tables, action buttons, transitions, animations, and protection and security features.

Lecture Hours: 1.5 Lab Hours: 1.5 Repeatable: No Grading: O

Recommended: Basic computer literacy

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**BIS-109 - Microsoft Office Units: 3**

Students will gain practical experience in creating business documents using the current version of the Microsoft Office applications. Students will learn to create, format and integrate Word and Excel documents, Access databases and PowerPoint presentations.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

Recommended: CIT 010

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None



**BIS-121 - Web Techniques for Business Units: 1**

Students will learn how the Internet is used to access business resources. Additional business uses will be covered that include communicating with customers, vendors and business partners; accessing business news and financial information.

Lecture Hours: 0.5      Lab Hours: 1.5      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-135 - Human Relations in the Workplace Units: 3**

This course will expound on the importance of human relations. Customer service will also be covered. In addition, attitude, good work habits, time management, ethics, personality styles, management styles, teamwork, leadership, diversity will be discussed. A hands-on approach will be used to demonstrate how employees can use soft skills effectively in the workplace and in personal situations.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-160 - Computerized Medical Billing Units: 2**

Students will be introduced to the billing process used in the medical offices today. Health insurance information will be covered. Students will learn to complete common medical insurance forms using a computer-based program. The medical billing career will be discussed. The claims process will be emphasized.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-161 - Computerized Medical Office Procedures Units: 1**

This course introduces students to a medical billing software application. Students will learn to input patient information, schedule appointments, input billing information, organize and file patient records. Maintaining an office system will be emphasized. Students will complete a medical office simulation.

Lecture Hours: 0.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Some keyboarding experience and knowledge of medical terminology are recommended

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**BIS-162 - Medical Coding Units: 2**

Students will learn step-by-step coding used in the medical field. The use of the CPT (Current Procedural Terminology) and ICD 9 (International Classification of Diseases) manuals will be covered. All codes used in the billing process in the medical environment will be covered. Students can use this course to help them prepare for the medical coding certification exam.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: L

Recommended: BIS 017

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Chemistry*****CHEM-001A - General Chemistry Units: 5**

This course is required for students majoring in biology, chemistry, geology, physics, forestry, pharmacy, veterinary medicine, dentistry, and medicine. Chem 001A also meets the one semester chemistry requirement for all engineering majors. This course covers basic chemical principles: atomic structure, bonding, periodicity, nomenclature, chemical reactions, stoichiometry, thermochemistry, physical states of matter, solutions, acids and bases, and dynamic equilibrium. The role that chemistry plays in everyday life, industry, and human welfare is emphasized.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: CHEM 015 and MATH 013, both with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**CHEM-001B - General Chemistry Units: 5**

This course is a continuation of Chemistry 001A, the second semester of a one year college level general chemistry sequence. The content includes thermodynamics, chemical kinetics, chemical equilibrium, electrochemistry, coordination compounds, nuclear chemistry, and organic chemistry. The laboratory emphasizes qualitative and quantitative analyses of inorganic compounds and introduces electronic instrumentation. The course is required for students majoring in physical and biological sciences and pre-professional majors such as pre-medicine and dentistry. The course also completes the basic chemistry requirements for students majoring in chemical and materials engineering.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: CHEM 001A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**CHEM-012A - Organic Chemistry****Units: 5**

This is the first semester of a year-long comprehensive organic chemistry course with emphasis on structure, reaction mechanisms and their kinetics. Topics include nomenclature, stereochemistry, mechanisms, reactions, and spectroscopic studies of organic compounds. Problem-solving techniques will be used to elucidate mechanistic, structural and stereochemical features of reactions and molecules. Lecture and laboratory will cover synthesis, isolation, purification, elucidation and identification of organic structures, instrumental methods and data interpretation.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: CHEM 001B with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CHEM-012B - Organic Chemistry****Units: 5**

This is the second semester of a year-long organic chemistry course designed to follow Chemistry 012A. Topics include nomenclature, stereochemistry, mechanisms, reactions, and spectroscopic studies of aliphatic and aromatic alcohols, aldehydes, ketones, acids, and other classes of organic and biological compounds (such as amino acids, proteins, and nucleic acids). Problem-solving techniques will be used to elucidate mechanistic, structural, and stereochemical features in chemical reactions. Lectures and laboratory methods will focus on synthesis, isolation, purification, elucidation and identification of organic structures as well as instrumental methods and data interpretation.

Lecture Hours: 3      Lab Hours: 6      Repeatable: No      Grading: L

Prerequisite: CHEM 012A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CHEM-015 - Fundamentals of Chemistry****Units: 4**

Chemistry 015 covers the fundamentals of modern inorganic chemistry with emphasis on atomic structure, chemical bonding, chemical formulas, nomenclature, equations, stoichiometry, gas laws, solutions and related topics. Chemistry 015 is intended primarily as a preparation for the Chemistry 001A and 001B sequence. The central nature of chemistry among other branches of science is stressed, and examples of the important role that chemistry plays in our lives are presented. The course also meets the general education requirements for a laboratory science.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 111 with P grade

Recommended: MATH 013 may be taken prior or concurrent with CHEM 015.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**CHEM-030A - Introduction to Chemistry****Units: 4**

This course covers the basic principles of chemistry. Content includes measurements; matter and energy; atomic structure, periodicity; chemical bonding and nomenclature; chemical reactions and equations; gases, solutions and colloids; oxygen, hydrogen and water; and acids, bases and salts. CHEM 030A is a prerequisite for microbiology and physiology and is designed to meet the chemistry requirements for nursing and other allied health majors. This course meets the General Education requirements for a laboratory science.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 111 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**CHEM-030B - Introduction to Chemistry****Units: 4**

This course introduces the basic principles of introductory organic and biological chemistry. It is designed for allied health and industrial technology majors. Content includes hydrocarbons, alcohols, ethers, carbonyl compounds, carboxylic acids, esters and amines, and an introduction to structures and properties of carbohydrates, lipids, and other biopolymers.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: CHEM 030A or CHEM 015 or CHEM 001A, with grade of C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**Communication Studies****COMS-010 - Interpersonal Communication****Units: 3**

This course provides students with an understanding of basic principles of general and interpersonal communication. It enables them to develop better interpersonal effectiveness through discussion of both effective and ineffective communication techniques, emphasizing the practice of constructive interactive skills.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A1      District GE: A1      IGETC: 1C

**COMS-018 - Introduction to Communication Studies****Units: 3**

Students examine the discipline of communication studies with emphasis on multiple epistemological, theoretical, and methodological issues relevant to the systematic inquiry and pursuit of knowledge about human communication. Students explore the basic history, assumptions, principles, processes, variables, methods, and specializations of human communication as an academic field of study.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COMS-020 - Oral Communication****Units: 3**

Students are taught the skills of speechmaking. Students focus on the following basic elements: rhetorical theory, researching, organizing and outlining a topic, analyzing an audience, effective use of language, ethics, effective presentation aids, critical listening, credibility, and physical delivery. Students will be required to attend speech activities outside of the classroom environment.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A1      District GE: A1      IGETC: 1C

**COMS-035 - Intercultural Communication Units: 3**

Students study communication transactions among members of differing cultures including definitions, perceptions, models, patterns, values, beliefs, customs, and attitudes that affect intercultural communication. Students will examine culture-specific modes of communication and identify factors that impede effective intercultural understanding.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D, ES      IGETC: 4

**COMS-040 - Introduction to Argumentation Units: 3**

This course provides students with an understanding of how to support intelligent decision making by using reasoned discourse. This course will covers instruction in logical analysis of modern controversies, the formulation of propositions for argument, construction of arguments, and application through discussion and debate. This course emphasizes the importance of competent advocacy in a free society.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A1,A3      District GE: A1,A3      IGETC: 1C

**COMS-045 - Small Group Communication Units: 3**

Students study communication and decision making within the group context. Concepts such as group interaction; leadership, status and power; conflict and cohesiveness; rules and roles; verbal and nonverbal messages and problem-solving will be investigated.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A1      District GE: A1      IGETC: 1C

**Computer & Information Technology****CIT-010 - Computer and Information Technology Units: 3**

This course is an examination of information systems in business. Students will focus on information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. Application of these concepts and methods will be through hands-on projects developing computer-based solutions to business problems.

Lecture Hours: 3      Lab Hours: 1      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-020 - Program Design and Development Units: 3**

This course is an introduction to computer programming and the fundamentals of application development. The focus is on problem solving and program design, including analysis, data structures, programming logic, and fundamental design techniques for event-driven programs. Students will code their designs in a modern programming language and development platform. Debugging and testing will be treated as extensions of the coding task.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 013 with a C grade or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-024 - Visual Basic Programming Units: 3**

Students will learn Visual Basic for .NET Framework in order to rapidly develop Windows applications with Graphical User Interface. This course covers Visual Basic concepts, tools, and programming methodology.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Knowledge of programming equivalent to that taught in either CIT 020, CIT 042, CIT 044, or COMSC 75

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-040 - Web Design I: Internet Publishing Units: 3**

This course teaches basic skills in HTML and design/layout concepts. These techniques will be used to design, develop and maintain professional Web sites.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Knowledge of Internet, equivalent to material taught in CIT 010. Familiarity with file manager; ability to use a simple text editor such as Notepad

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-041J - JavaScript/Dynamic HTML Units: 3**

This course is intended for students with some knowledge of programming. Students learn to use JavaScript language to dynamically modify nearly all aspects of a web page, including images, links, text, and styles. Students also use JavaScript to validate forms, create data that persists across pages, and handle user input, including mouse and keyboard events. The course also introduces the standard Document Object Model that is used to represent web pages, and is also used by other technologies such as XML. Students study debugging techniques and best practices for writing code.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Knowledge of programming equivalent to that gained in CIT 020 (Program Design and Development). This includes but is not limited to knowledge of variables, control structures, loops, and arrays.

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-041X - Introduction to XML****Units: 3**

XML is a notation for generating custom markup languages. Students will create their own XML-based markup, validate it, and integrate different markup languages in a single document. They will use stylesheets to display their XML documents in a browser. Students will also use tools from the XML family of technologies to transform documents and adapt them for multiple purposes.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Basic Computer Literacy, familiarity with HTML concepts (such as those taught in CIT 040)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-042 - Perl Programming****Units: 3**

This course is intended for students with some knowledge of programming, and covers most of the Perl programming language. The course includes a review of programming basics and continues on to object-oriented programming, networking, and graphics. Students will learn how to create packages and modules, and interact with web pages via CGI.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Basic Computer Literacy, familiarity with programming concepts (such as those taught in CIT 020)

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-043A - PHP and MySQL****Units: 3**

This course will introduce students to PHP and MySQL. This course will cover installation, configuration, and administration of PHP and MySQL. Students will use PHP for server-side processing of their dynamic web pages. Students will use SQL to build MySQL databases and tables, to access, insert, delete, and modify database content, and to administer user accounts. This course will use PHP to interact with MySQL database for simple Web-based applications.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Knowledge of computer programming equivalent to that provided in CIT 020 (Program Design and Development).  
 Knowledge of HTML and CSS equivalent to that provided in CIT 040 (Internet Publishing - Web Design I)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-044 - Java Programming****Units: 3**

This course is intended for students with some knowledge of programming who want to develop Java applets and stand-alone applications. Java interfaces, class inheritance, and exceptions will be covered. Applications covering I/O and graphics will also be addressed.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Knowledge of programming equivalent to that taught in either CIT 020, CIT 042, CIT 024, or COMSC 75.

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-050 - Introduction to UNIX/Linux****Units: 3**

This is an introductory course in the UNIX/ Linux operating system. It covers a basic editor, file and directory manipulation, processes, standard files, access permission, mail, write and talk. The course also addresses the bash shell, including the shell command line, setup, customizing the shell environment, the alias mechanism, pipes, filters, and I/O redirection. Additionally, document formatting packages and system administration are briefly introduced.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Computer literacy

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-052 - UNIX/Linux Shell Programming****Units: 3**

This is a beginning course in UNIX/Linux Shell Programming using different shell programs available with the UNIX and Linux operating systems. The course will include use of bash and C-Shell Programming theory and concepts. These concepts include interpretation of different quote characters, shell variables, decision making commands and looping mechanisms. Students will also learn passing of arguments to shell scripts, IO redirection, terminal/file IO, subshells and using special UNIX commands. Additionally, this course will include use of the sed and awk utilities, and an introduction to Korn shell commands.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Basic Computer Literacy, familiarity with UNIX/Linux systems such as taught in CIT 050 (prior)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-054 - UNIX/Linux System Administration****Units: 3**

This course includes a review of basic UNIX/Linux commands and also covers: using administration tools, mounting and unmounting the file systems, adding and removing users from the system, and backing up and restoring the file system. Students learn to utilize UNIX/Linux tools to administer user accounts and groups and administer devices, printers and networking services. Also included are planning, setting up and administering log files, basic network file system setup, use of UNIX/Linux tools to administer hardware, and troubleshooting file access problems.

Lecture Hours: 2.5      Lab Hours: 1.5      Repeatable: No      Grading: L

Recommended: Basic computer literacy; knowledge of Linux equivalent to that taught in CIT 050 (Introduction to Linux/UNIX)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CIT-073 - Fundamentals of Data Communications and Networking****Units: 3**

This course is an introduction to the architecture, structure, functions, components, and models of the Internet and other computer networks. 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. Students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-074 - IP Routing Protocols (CCNA)****Units: 3**

This course describes the architecture, components, and operations of routers, and explains the principles of routing and routing protocols. Students will be given the opportunity to configure a router for basic and advanced functionality. Students will be able to configure and troubleshoot routers and resolve common issues with RIPv1, RIPv2, EIGRP, and OSPF in both IPv4 and IPv6 networks.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-075 - The Local Area Networks: Ethernet and Wireless Networks (CCNA)****Units: 3**

This course introduces the design, configuration, deployment, analysis and troubleshooting of Local Area Networks. It provides both lecture and laboratory practices in a variety of areas such as the fundamentals of Ethernet switches, Virtual Local Area Networks (VLANs), the VLAN Trunking Protocol (VTP), the Spanning Tree Protocol (STP and RSTP) and Inter-VLAN Routing. Students learn the details of the configuration of these functions and operation of the protocols. This course helps prepare the student for the Cisco CCNA, CCNP and CWNA certification.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-076 - Introduction to Wide Area Networks, Network Security & IP Addressing Services (CCNA)****Units: 3**

This course introduces Wide Area Network technologies and protocols, network security, and IP addressing services. It provides both lecture and laboratory practice in a variety of areas including PPP and Frame Relay, Access Control Lists, Virtual Private Networks (VPNs), Dynamic Host Configuration Protocol, DHCP, Network Address Translation (NAT) and Network Troubleshooting. This course helps prepare the student for the Cisco CCNA and CCNP certification.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-077 - Introduction to IP Network Security****Units: 3**

This course provides a next step for students who want to enhance their CCNA-level skill set and help meet the growing demand for network security professionals. The course provides an introduction to the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices. This course helps prepare students for entry-level security career opportunities and the globally recognized Cisco CCNA Security certification.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-078 - Advanced Switching & Campus LAN Design (CCNP)****Units: 3**

This course provides the knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions using Cisco's Campus Enterprise Architecture. Secure integration of VLANs, WLANs, voice and video into campus networks is also provided. The material is presented in a lecture and discussion format supplemented by comprehensive laboratory exercises. This course uses the official Cisco Academy CCNP SWITCH curriculum and is designed to provide preparation for the CCNP SWITCH certification exam.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: CIT 075 with C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-079 - Advanced IP Routing Protocols & Services (CCNP)****Units: 3**

This course is designed to help students advance their knowledge and skills and work independently on complex network solutions. Students will plan, configure and verify the implementation of secure enterprise LAN and WAN routing solutions using a range of routing protocols. Configuration of solutions to support branch offices and mobile workers will be presented. This course uses the official Cisco Academy CCNP ROUTE curriculum and is designed to provide preparation for the CCNP ROUTE certification exam.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: CIT 074 with C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-091 - Network Troubleshooting (CCNP)****Units: 3**

This course provides the knowledge and teaches the skills necessary to (1) plan and perform regular maintenance on complex enterprise routed and switched networks and (2) use technology-based practices and a systematic ITIL- compliant (Information Technology Infrastructure Library) approach to perform network troubleshooting. This course uses the official Cisco Academy CCNP TSHOOT curriculum and is designed to provide preparation for the CCNP ROUTE certification exam.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CIT-092 - Enterprise Wireless Local Area Networks****Units: 3**

This course provides a broad and in-depth knowledge of enterprise wireless LAN administration. It provides a complete foundation of knowledge needed for entering into or advancing in the wireless networking industry. From basic RF theory to 802.11 frame exchange processes are covered. This course delivers hands-on training that will benefit the novice as well as the experienced network professional. It provides preparation for the CWNA Certification examination.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None



**CIT-101 - Storing and Retrieving Big Data Units: 4**

This course prepares students to manage large-scale collections of data as objects to be stored, searched, selected, and transformed for use. Students examine both the background theory and practical application of information retrieval, database design and management, data extraction, transformation and loading for data warehouses, and operational applications. In addition, traditional methods of information retrieval and database management as well as new approaches that use massively parallel computation (MapReduce/Hadoop) will be examined. Through readings, discussion, and hands-on experimentation, students will be prepared to discuss, plan, and implement storage, search and retrieval systems for large-scale structured and unstructured information systems using a variety of software tools. They will also be able to evaluate large-scale information storage and retrieval systems in terms of both efficiency and effectiveness in providing timely, accurate, and reliable access to needed information.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L  
Credit by Exam: Yes

*Advisory Level:*      Read: 2      Write: 2      Math: 3  
Transfer Status: None      Degree Applicable: NAA  
CSU GE: None      District GE: None      IGETC: None

**CIT-102 - Computer and Network Security Units: 4**

The course covers principles of computer systems and network security. We will discuss various attack techniques and how to defend against them. Topics include network attacks and defenses, operating system holes, web security, e-mail, botnet, malware, social engineering attacks, privacy, and digital rights management. Course projects will focus on building reliable code and understanding attacks.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
Transfer Status: None      Degree Applicable: NAA  
CSU GE: None      District GE: None      IGETC: None

**CIT-103 - Introduction to Machine Learning, Data Mining and Statistical Learning Units: 4**

This course provides an overview of fundamental techniques in machine learning, data mining and statistical learning. Topics include density estimation (parametric and nonparametric approach), linear and nonlinear regression, decision trees, Naive Bayes, clustering algorithms, association rules, dimension reduction, anomaly detection, graph mining, time-series analysis and applications in social media analysis, recommendation system, and massive data analytics.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

Prerequisite: COMSC 110 with C or better

*Advisory Level:*      Read: 2      Write: 2      Math: 3  
Transfer Status: None      Degree Applicable: NAA  
CSU GE: None      District GE: None      IGETC: None

**CIT-104 - Mining Massive Data Sets Units: 4**

The course covers data mining and machine learning algorithms for analyzing very large amounts of data. The emphasis is on Map Reduce as a tool for creating parallel algorithms that can process very large amounts of data.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

Prerequisite: CIT 103 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 6  
Transfer Status: None      Degree Applicable: NAA  
CSU GE: None      District GE: None      IGETC: None

**CIT-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
Transfer Status: CSU      Degree Applicable: AA/AS  
CSU GE: None      District GE: None      IGETC: None

**Computer Aided Design & Drafting****CADD-130 - Fundamentals of AutoCAD Units: 3**

This course is a Computer-Aided Drafting and Design (CADD) course in which the students will learn the fundamentals of using AutoCAD® software. The students will learn basic CADD techniques that are used to: draw and edit drawing entities; manipulate screen displays; write text; lay out drawings; print and plot drawings; apply dimensions; and manage drawing files. An introduction to computer use will be included in this course and previous knowledge of computers or computer programming is not required.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Basic computer skills

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
Transfer Status: None      Degree Applicable: AS  
CSU GE: None      District GE: None      IGETC: None

**CADD-131 - 3-D Modeling and Design - Using AutoCAD Units: 2**

This course is a computer-aided drafting and design (CADD) course where students will learn intermediate to advanced applications of AutoCAD software. Specific areas to be covered in this course include: working in model and paper space; drawing and viewing in 3-D space; creating 3-D models; using blocks with attributes; working with external references; rendering; understanding user coordinate system; AutoCAD and the Internet; advanced drawing, editing, and configuration procedures; and an introduction to user-level system customization.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: CADD 130 or equivalent coursework or work experience.

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
Transfer Status: None      Degree Applicable: AS  
CSU GE: None      District GE: None      IGETC: None

**CADD-132 - Using AutoCAD Mechanical Units: 2**

AutoCAD Mechanical is an integrated CAD package of advanced design tools, and drafting and drawing capabilities that help conceptualize, design, and document mechanical products. This course is an advanced computer-aided drafting and design (CADD) course where students learn to use AutoCAD Mechanical software.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: CADD 131 or equivalent coursework or work experience.

*Advisory Level:*      Read: 2      Write: 2      Math: 2  
Transfer Status: None      Degree Applicable: AS  
CSU GE: None      District GE: None      IGETC: None

**CADD-133 - Using Autodesk Inventor****Units: 2**

Inventor is a feature-based, solid modeling tool intended for people who want to create and develop mechanical designs in a 3-D environment. This course is a computer-aided drafting and design (CADD) course wherein the students will learn the fundamentals of Autodesk Inventor software.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: Basic computer skills.

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-134 - Advanced Autodesk Inventor****Units: 2**

This advanced Autodesk Inventor course extends what was learned in the Using Autodesk Inventor course by addressing topics that include advanced model creation techniques, sheet metal design, top-down assemblies, use of design elements, and creation of presentations.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: Prior Autodesk Inventor training and/or experience is recommended.

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-135 - Design Using AutoCAD Civil-3D****Units: 2**

This is a CADD course that focuses on the use of Autodesk AutoCAD Civil-3D software. This course is designed for students, civil engineers and surveyors who want to take advantage of AutoCAD Civil-3D's interactive, dynamic design functionality. In this course students will learn techniques enabling them to organize project data, work with points, create and analyze surfaces, model road corridors, create parcel layouts, perform grading and volume calculations tasks, and lay out pipe networks. This course focuses on teaching students the core tasks and workflows that are needed to successfully operate AutoCAD Civil-3D.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: L

Recommended: CADD 140A or equivalent coursework or work experience

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-138 - Work Experience****Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-139 - Using Solidworks****Units: 2**

Solidworks is a feature-based, solid modeling tool intended for people who want to create and develop mechanical designs in a 3-D environment. This course is a computer-aided drafting and design (CADD) course wherein the students will learn the fundamentals of Solidworks software.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-140A - Technical Graphics - Using CAD Tools****Units: 2**

This course is a beginning level CADD course focusing on standard concepts of technical graphics communication. The fundamental concepts of orthographic projection, sketching, section views, auxiliary views, dimensioning practices, and drawing annotations used in variety of technical applications will be covered. Students explore the learning process through a series of design situations, industry scenarios, and projects. Students will be introduced to multiple CAD tools.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: Prior CADD training and/or experience

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-140B - Advanced Technical Graphics - Using CAD Tools****Units: 2**

This course is a CADD course focusing on the application of drafting concepts using orthographic projection, dimensioning practices, and geometric tolerancing. Strong emphasis is put on the type of design and industrial applications which can be found in the real world. Creating models, drawings and assembly drawings in CAD programs will be covered in this course. This course also teaches creation of basic multi-part assemblies, constraint-driven assembly animation, and generation of detailed production drawings.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: Prior CADD training and/or experience

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-141 - Design and Analysis Using Creo or SolidWorks****Units: 2**

This course is geared towards students who wants to learn engineering design while learning the 3D modeling using Creo or SolidWorks. This course focuses on applying Creo Parametric or SolidWorks as a design tool. Design steps, geometrical tolerancing, and the creation of detail and assembly drawing documentation will be covered. Analysis of current design practices and/or manufacturing processes will be included through research of standards, catalogs, data sheets, drawings, and other reference sources.

Lecture Hours: None      Lab Hours: 6      Repeatable: No      Grading: O

Recommended: CADD 140A or equivalent coursework or work experience

**Advisory Level:**      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**CADD-142 - Geometrical Dimensioning and Tolerancing Units: 2**

CADD 142 is a CADD course that focuses on a study of dimensioning and tolerancing based on ASME Y14.5-2009 standards. Emphasis will be given to geometric dimensioning and tolerancing concepts, tolerance studies, general dimensioning and tolerancing techniques and theory.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: O

Recommended: CADD 140A and CADD 140B or equivalent coursework or work experience

*Advisory Level:* Read: 2 Write: 2 Math: 2  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-144A - Architectural Design and Drafting Using Revit Architecture Units: 2**

This course is an architectural drafting and designing course where the students will apply CADD techniques to typical architectural drawing and design problem. Revit Architecture is a powerful architectural design and drafting tool that works the way architects think. From preliminary design through design development, and into construction documents, the program streamlines the design process with a central 3D model. Changes made in one view update across all views and on the printable sheets. This course is designed to teach the students the Revit functionality as well as architectural design process and methods.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: L

Recommended: Basic computer skills

*Advisory Level:* Read: 2 Write: 2 Math: 2  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-144B - Architectural Design and Drafting Using Revit Structure and MEP Units: 2**

This course is geared for beginning architectural students or professional architects who want to get a start into 3D parametric modeling for commercial structures. This course is designed to provide the students with a well-rounded knowledge of Autodesk Revit tools and techniques. All three flavors of the Revit platform are introduced in this course. This approach gives the students a broad overview of the Building Parametric Modeling process. This course covers the design integration of most of the building disciplines: Architectural, Interior Design, Structural, Mechanical, Plumbing and Electrical.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: L

Recommended: Basic computer skills

*Advisory Level:* Read: 2 Write: 2 Math: 2  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-145 - Landscaping Design Using CAD Tools Units: 2**

This course is an architectural drafting course where the student will apply CADD techniques to typical landscaping design problems. The drawing, detailing and design of landscaping elements of typical residential or commercial architectural sites will be the focus of this course.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: L

Recommended: CADD 140A or equivalent coursework or work experience

*Advisory Level:* Read: 2 Write: 2 Math: 2  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-146A - AutoCAD Software Updates Units: 0.5 - 2**

CADD 146A is a computer-aided drafting and design course that offers students lab training in the updates and new features included in latest release of AutoCAD software.

Lecture Hours: None Lab Hours: 1.5 - 6 Repeatable: 3 Grading: L

Recommended: CADD 130 or CADD 131 or equivalent coursework or work experience

*Advisory Level:* Read: 2 Write: 2 Math: 2  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-146B - Inventor Software Updates Units: 0.5 - 2**

CADD 146B is a computer-aided drafting and design course that offers students lab training in the updates and new features included in the latest release of Inventor software.

Lecture Hours: None Lab Hours: 1.5 - 6 Repeatable: 3 Grading: O

Recommended: Prior CADD knowledge

*Advisory Level:* Read: 2 Write: 2 Math: 1  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**CADD-146C - Solidworks Software Updates Units: 0.5 - 2**

CADD 146C is a computer-aided drafting and design course that offers students lab training in the updates and new features included in latest release of Solidworks software.

Lecture Hours: None Lab Hours: 1.5 - 6 Repeatable: 3 Grading: O

Recommended: Prior CADD knowledge

*Advisory Level:* Read: 2 Write: 2 Math: 1  
 Transfer Status: None Degree Applicable: AS  
 CSU GE: None District GE: None IGETC: None

**Computer Science****COMSC-020 - Introduction to Programming Concepts and Methodologies Units: 3**

This course is an introduction to basic computer programming concepts using both the procedural and an object-oriented paradigm. It is intended for non-computer science majors, and for students interested in COMSC 075 but would like a more gradual entry into computing fundamentals. Topics include hands-on practice with software engineering tools, simple programs, variables, control structures, functions, input/output and introduction to abstraction. Specifications, adherence to style guidelines, and the importance of testing to ensure that programs are usable, robust and modifiable, will be addressed throughout the course.

Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L

Recommended: Basic knowledge of computer usage and keyboarding skills

*Advisory Level:* Read: 3 Write: 3 Math: 2  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**COMSC-072 - Discrete Mathematics****Units: 4**

This course is an introduction to the discrete and combinatorial mathematics that serves as a foundation for advanced courses in mathematics and computer science. Topics include logic, predicates and quantifiers, validity of argument, mathematical proof techniques (including induction), sets, Boolean algebras, recursive algorithms, functions, relations, elementary number theory, combinatorics, discrete probability, and an introduction to graphs and trees.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Prerequisite: MATH 021 and 022 or MATH 025; all with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: None

**COMSC-075 - Computer Science I: Introduction to Program Structures****Units: 4**

This course is an introduction to computer programming concepts from a computer science perspective. Programming structures of sequential, selection and repetition are covered using a high-level object oriented language. Using existing classes and creating classes, methods, argument passing, program and data abstraction (including arrays) are covered. Documentation, programming style, and program design and development are addressed throughout the course.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 021 and 022, or Math 025, all with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COMSC-076 - Computer Science II: Introduction to Data Structures****Units: 4**

This course covers fundamental data structures, including linear lists, stacks, queues, trees, and other linked structures, arrays, strings, and hash tables. Software engineering techniques will be applied to the design and development of large programming projects in an object-oriented environment. The course also covers abstract data types and algorithms for searching and sorting.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: COMSC 075 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COMSC-077 - Computer Organization and Systems****Units: 4**

The course covers the organization, systems, and machine-level programming of computer systems. Topics include mapping of high-level language constructs into assembly code, internal data representations, numerical computation, virtual memory, pipelines, caching, multitasking, MIPS architecture, MIPSA assembly language code, interrupts, input/output, peripheral storage processing, and comparison of CISC (Intel) and RISC (MIPS) instruction sets.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: COMSC-075 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COMSC-138 - Work Experience****Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**Computerized Individual Instruction****CII-205 - Introductory Keyboarding****Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. Students will be introduced to computer keyboarding. Practical experience is emphasized. This course prepares students for a more comprehensive BIS keyboarding class. Students pursuing BIS certificates should enroll in BIS 11A instead of this course.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CII-215 - Introductory Word Processing****Units: 0.5**

This course is a self-paced individualized course offered to students with very little or no experience on a computer. Students will be introduced to computer word processing. Emphasis is on practical experience. The course is targeted for students who have little (or no) experience with word processing. This course prepares students for a more comprehensive BIS word processing class and gives students the skills to complete their school assignments.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CII-220 - Introductory Email and Internet****Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. Students will be introduced to the Internet and email. Practical experience is emphasized. Students pursuing the BIS certificates should enroll in BIS 121 instead of this course.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**CII-225 - Introductory Spreadsheet Units: 0.5**

This course is a self-paced individualized study course offered to students with very little (or no) experience with a computer. During this course students will be introduced to computer spreadsheets. Emphasis is on practical experience. The course is targeted at students who have little or no experience with spreadsheets. Students pursuing the BIS certificates should enroll in BIS 102B instead of this course.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-230 - Introductory Presentations Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. During this course students will be introduced to computer presentation skills. Emphasis is on practical experience. The course is targeted for students who have had little (or no) experience with computer presentations. This course prepares students for a more comprehensive BIS presentation class such as BIS 107.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-235 - Introductory to Windows Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. During this course students will be introduced to the Windows operating system. Emphasis is on practical experience. The course is targeted for students who have had little (or no) experience with Windows. This course prepares students for a more comprehensive BIS class such as BIS 95.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-240 - Introductory Desktop Publishing Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. During this course students will be introduced to desktop publishing. Emphasis is on practical experience. This course prepares students for a more comprehensive publishing or graphics class such as BIS 035.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-245 - Introductory Database Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. During this course students will be introduced to databases. Emphasis is on practical experience. This course prepares students for a more comprehensive database class such as BIS 104.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-250 - Basic Web Page Units: 0.5**

In this self-paced individualized study course, students learn basic web page design skills using templates or wizards and how to apply those skills. Students learn to add graphics and print web pages. Students should already know the very basic skills needed to access the Internet. Emphasis is on practical experience. This course prepares students for a more comprehensive BIS class such as BIS 121 or BIS 125.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-270 - Introductory Course Management System (CMS) Units: 0.5**

This course is a self-paced individualized study course offered to students with very little or no experience on a computer. During this course, students will be introduced to CMS tools skills.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**CII-275 - Basic Computer Literacy Units: 0.5**

This is a self-paced individualized study course which introduces basic computer skills that are recommended for EVC students. Topics covered include definition and introduction to word processing, graphics, computer-assisted instruction, Internet, and email. Emphasis is on practical experience such as mouse moves, starting and exiting programs, renaming, saving and retrieving files, and general computer terms.

Lecture Hours: None Lab Hours: 1.5 Repeatable: No Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None



***Counseling*****COUNS-013 - Career Planning****Units: 3**

This course assists students with career/major selection. Students will identify personal interests, abilities, goals, values, and lifestyle preferences. Students will examine career trends and opportunities, employment outlook and the nature of today's workplace. Students will learn about personal and professional planning as it relates to careers through job search techniques, resume writing, interviewing, career building and realistic decision making.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**COUNS-014 - College Success****Units: 3**

This course surveys effective study skills and methods by contrasting ineffective study habits with techniques that maximize learning and memory. Emphasis is on promoting healthy changes in lifestyle that manage stress, improve health and overall well-being. Techniques to change behavior such as setting goals, managing time, increasing concentration, and controlling procrastination are practiced. Lecture topics include effective listening and note-taking skills, textbook reading, marking and vocabulary systems, memory strategies, and research paper methods using library resources. This course orientates students to transition to college course expectations and procedures. (Formerly GUIDE-095)

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**COUNS-015 - Blueprint for Success****Units: 1**

This course is designed to develop students' personal effectiveness in school and in life. Students will explore and clarify their belief systems, values, and attitudes; identify personal strengths and weaknesses; examine and identify psychological and societal barriers; and overcome obstacles to success through mental strategies and techniques such as time and stress management, study techniques and goal setting. (Formerly GUIDE-085)

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COUNS-016 - Career Self-Assessment****Units: 1**

Students will identify personal qualities and skills useful in selecting possible career paths. Using inventories and exercises of self-assessment, students will gather information about their abilities, aptitudes, interests, goals, lifestyle preferences, personality and values, and relate these qualities and skills to the world of work. Students will identify personal and workplace stereotypes and barriers that act as impediments to career selection and career exploration. (Formerly GUIDE-081)

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**COUNS-017 - Transfer to Four-Year Institution Simplified****Units: 1**

This course assists students through their active participation in all aspects of transfer to a 4-year public or private institution. Major topics include selecting a transfer college or university, choosing a major, examining lower division major and general education requirements, reviewing admission procedures, identifying application deadlines, exploring financial aid and scholarship options, and completing the transfer application. (Formerly GUIDE-075)

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: O

**Advisory Level:**      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**COUNS-018 - Planning an Educational Future: EVC to SJSU****Units: 1**

This course is designed to assist students who have applied to San José State with their transition from EVC to San José State University. Students will actively plan the steps for this transition. Students will tour the SJSU campus, become aware of its various academic and non-academic resources and meet with faculty and staff from SJSU. Students will do basic career/major exploration, learn about California's higher education system, and prepare educational plans. (Formerly GUIDE-086)

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Dance*****DANCE-002 - Dance Appreciation****Units: 3**

Students will explore dance from an aesthetic, historic, and cultural point of view. Students will examine the elements of dance including body, space, time, and dynamic qualities and develop a vocabulary with which to analyze and write critically about dance. Dance will be explored in many of its genres including social dance, jazz dance, ballet, modern, and dance from cultures around the globe from historical and contemporary perspectives. Attendance at a live dance performance may be required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**DANCE-010 - Ballet, Beginning****Units: 1**

In this course students will focus on the fundamentals of ballet technique while learning traditional French ballet terminology through barre and centre work. Students will be introduced to principles of alignment, port de bras, coordination and musicality while developing strength, flexibility, control and performance quality. The student will gain an appreciation of his/her own unique body in relation to ballet as a classical art form. Attendance at a live dance performance may be required. Students may take no more than 4 units of the combined DANCE 010 and DANCE 011 courses.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-011 - Ballet, Intermediate****Units: 1**

This course furthers the student's artistry and skill in classical ballet. The student will apply fundamentals of theory and technique with attention to musicality and performance in the execution of intermediate level barre and centre combinations. The intermediate class will draw from the fundamentals of the beginning ballet while increasing the difficulty in coordination, complexity, tempo and stamina. The student will gain fluency in the use of traditional French vocabulary. Attendance at a live dance performance may be required. Students may take no more than 4 units of the combined DANCE 011 and DANCE 010 courses.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: DANCE 010 with C or better, or assessment based on instructor evaluation

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**DANCE-014 - Dancers' Workshop****Units: 0.5 - 2**

Students will be involved in the dance rehearsal process which culminates in a public performance. Students participate as dancers, rehearsing and performing repertory reconstructions, folkloric arrangement and original student and faculty choreography. Repeatable to a maximum of 8 units.

Lecture Hours: None      Lab Hours: 2 - 6      Repeatable: No      Grading: L

Recommended: DANCE 010 - Ballet, Beginning or  
 DANCE 020 - Jazz, Beginning or  
 DANCE 040 - Tap Dance or  
 DANCE 050 - Modern, Beginning

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**DANCE-019 - Jazz Dance, Fundamentals****Units: 1**

Students will be introduced to the fundamental skills of jazz dance technique. Students will learn primary positions, isolations, and locomotor movements. Exploration of movement qualities, basic rhythms, and musical phrasing unique to jazz dance, will be a focus of the course. The student will gain an appreciation of his/her own unique body in relation to jazz dance as a dynamic art form. Attendance at a live performance may be required.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**DANCE-020 - Jazz Dance, Beginning****Units: 1**

Students will be introduced to beginning skills of jazz dance technique. The student will integrate beginning positions, isolations, and locomotor movements into full body actions and explore movement qualities, polyrhythms, and musical phrasing unique to jazz dance. The student will gain an appreciation of his/her own unique body in relation to jazz dance as a dynamic art form. Attendance at a live performance may be required. It is recommended that students take DANCE 019, Jazz Dance, Fundamentals, or have some previous dance experience before taking this course.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: DANCE 019, or previous dance experience

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-021 - Jazz Dance, Intermediate****Units: 1**

This course works to develop the student's artistry and jazz dance technique at the intermediate level. The student will apply theory and technique with attention to musicality and performance in the execution of intermediate jazz dance combinations. The course will draw from the beginning level class while increasing the difficulty in coordination, complexity, tempo, stamina, artistry, and the use of vocabulary. Attendance at a live performance may be required.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: DANCE 020 with C or better, or assessment based on instructor evaluation

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-021B - Jazz Dance, High-Intermediate****Units: 1**

This course continues to develop the student's artistry and jazz dance technique at the high-intermediate level. The student will apply theory and technique with attention to musicality and performance in the execution of high-intermediate jazz dance combinations. The course will draw from the intermediate level class while increasing the difficulty in coordination, complexity, tempo, stamina, artistry, and the use of vocabulary. Attendance at a live performance may be required.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: DANCE 021 with C or better, or assessment based on instructor evaluation

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-022 - Social Dance****Units: 1**

Students will learn basic steps, rhythms, and partnering techniques for various social dance forms of European and Latin American origins including Merengue, Waltz, Rhumba, Cha-Cha, Salsa, and Swing Dance. Stylistic origins and evolution in social and historical contexts will also be discussed.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-022B - Intermediate Social Dance****Units: 1**

This course works to develop the students' artistry and technique of Social Dance at an intermediate level. Students will learn intermediate steps, rhythms, and partnering techniques for various social dance forms of European and Latin American origins including Merengue, Waltz, Rhumba, Cha-Cha, Salsa, and Swing Dance. Stylistic origins and evolution in social and historical contexts will also be discussed.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: DANCE 022 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**DANCE-022C - High-Intermediate Social Dance Units: 1**

This course works to develop the students' artistry and technique of Social Dance at a High-intermediate level. Students will learn high-intermediate steps, rhythms, and partnering techniques for various social dance forms of European and Latin American origins such as the Merengue, Waltz, Rhumba, Cha-Cha, Salsa, and Swing Dance. Other social dance forms may be covered. Stylistic origins and evolution in social and historical contexts will also be discussed.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: DANCE 022B with a C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: E IGETC: None

**DANCE-040 - Tap Dance Units: 0.5**

This course introduces the student to elementary tap dance technique and application. The student will learn basic steps, rhythms and elements of improvisation. The student will gain understanding and appreciation of his/her own physical coordination and rhythmic sense in relation to tap dance as a traditional and contemporary performing art.

Lecture Hours: None Lab Hours: 2 Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: E District GE: E IGETC: None

**DANCE-049 - Modern Dance, Fundamentals Units: 1**

Students will be introduced to fundamental skills of modern dance technique. Students will learn basic positions, gestures, traveling and jumping steps, turns, level changes, and spatial orientation. The student will gain an appreciation of her/his own unique body in relation to modern dance as an expressive art form. Attendance at a live dance performance may be required.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: O

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**DANCE-050 - Modern Dance, Beginning Units: 1**

Students will be introduced to beginning skills of modern dance technique. The student will learn basic positions, gestures, traveling and jumping steps, turns and level changes. The student will learn about spatial orientation and will gain an understanding and appreciation of her/his own unique body in relation to dance as an expressive art form. It is recommended that students take DANCE 049, Modern Dance, Fundamentals, or have some previous dance experience before taking the class. Attendance at a live dance performance may be required.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: O

Recommended: DANCE 049, or previous dance experience

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: E District GE: E IGETC: None

**DANCE-051 - Modern Dance, Intermediate Units: 1**

Students will be working at an intermediate level modern dance technique. Focus will be on intermediate level positions, gestures, traveling and jumping steps, turns, level changes and spatial orientation. The student will work towards a deeper level of artistry and expression through musicality and dynamic qualities of movement. The students will gain an understanding and appreciation of her/his own unique body in relation to dance as an expressive art form. Attendance at a live dance performance may be required.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: DANCE 050 with C or better, or assessment based on instructor evaluation

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: E District GE: E IGETC: None

**DANCE-051B - Modern Dance, High-Intermediate Units: 1**

This course works to develop the student's artistry and modern dance technique at a high-intermediate level. The student will apply theory and technique with attention to musicality and performance in execution of high-intermediate positions, gestures, traveling and jumping steps, turns and level changes with increasingly more complicated patterns and weight changes. Attendance at a live performance may be required.

Lecture Hours: None Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: DANCE 051 with C or better, or assessment based on instructor evaluation

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: E District GE: E IGETC: None

***Economics*****ECON-010A - Principles of Macroeconomic Theory Units: 3**

This course explains the forces affecting national economies such as variations in money and credit, income, output, productivity, employment, prices and inflation. ECON 010A examines monetary and fiscal theories, explains the role the government plays in the U.S. and other national economies as a result of monetary and fiscal policies and through the exercise of its regulatory powers. The course also provides an overview of how changes in inflation rates, interest rates, and the international value of the dollar reflect variations in the economy. This course provides an overview of the effects the government has upon businesses and households as a result of its taxation and spending policies.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 111 with P grade

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: D District GE: D IGETC: 4

**ECON-010B - Introduction to Microeconomic Theory Units: 3**

Microeconomics focuses on economic behavior of individual economic units such as consumers, firms, and resource owners. It examines the market system as a means of solving the problems in the production and distribution of goods and services in a society. An analysis of the effectiveness of the price system in providing the society with an equitable distribution of goods, services and income is featured. It explores some of the more urgent micro-economic problems such as monopoly power of big business and big unions, government regulations and consumer protection, the energy crisis, taxes and welfare.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 111 with P grade

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: D District GE: D IGETC: 4

**ECON-012 - Introduction to Global Economics Units: 3**

This Introduction to Global Economics course will be a cornerstone and foundational component for students pursuing degrees in International Business, and an invaluable supplement for those in other areas of business or economics. With the diverse student body of EVC, rich with first- and second-generation residents, this Global Economics course and the language/cultural skills and connections of the students will broaden their ambitions. This course will catalyze their academic and career success.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 013 with C or better

Recommended: ECON 010A or ECON 010B, prior or concurrent enrollment.

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: D District GE: D IGETC: 4

**Education****EDUC-012MS - Math and Science Future Teacher Seminar Units: 3**

This course is designed to provide students interested in 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 school. The course includes work with mathematics and science materials, 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 school.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 3  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**EDUC-013MS - Math and Science Future Teacher Seminar II Units: 3**

This is the second course designed to provide students interested in 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 middle, or high school. The course includes work with mathematics and science materials, assessment, methodology, and the school environment. The course includes 50 hours of on-site service learning field experience as a classroom assistant in a local middle or high school.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 013 and EDUC 012MS; both with C or better

Advisory Level: Read: 3 Write: 3 Math: 4  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**EDUC-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 2.07 Repeatable: 15 Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**Educational Instruction Technology****EDIT-005 - Introduction to Online Learning Units: 1**

This course explores the fundamentals of learning in an online environment by preparing first time online students. It will explore how the online learning environment differs from face-to-face instruction and present important tips to online learning through use of online tools, technologies and strategies. Students will be engaged in topics such as the characteristics and unique needs of the online learner, and learning styles and diversity in an online class. Emphasis will be placed on student engagement and motivation, and creating a collaborative and interactive environment while gaining practical experience with online tools and mobile devices.

Lecture Hours: 1 Lab Hours: None Repeatable: No Grading: L

Recommended: Use of keyboard, mouse, handheld devices and basic experience with using computers, iPads, iPhones, Smartphones

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**EDIT-010 - Computers and Digital Media in Education Units: 3**

Students will learn how to effectively implement instructional technology into an educational environment. Students will explore how Internet and online learning technology, combined with pedagogy, computer applications, digital media and web technology tools, can be used for teaching and learning.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None



**EDIT-012 - Online Learning Technologies, Tools and Techniques Units: 3**

This course provides an overview of the communication technologies and instructional tools used in presenting and developing online curriculum. It is designed to help students explore various tools available to create a virtual classroom and the instructional issues involved in the implementation of teaching and learning online. Participants draw from their own teaching experiences to develop actual online curriculum using interactive tools such as threaded discussions, lecture capture, podcasting, vodcasting, webconferencing and a variety of synchronous and asynchronous learning tools that are provided by the emerging technologies.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Recommended: Computer skills should include familiarity with the Internet and file management

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**EDIT-022 - Course Management System (CMS) to Develop Online Courses Units: 3**

This course teaches the skills and knowledge necessary to create effective online learning environments using a Course Management System (CMS). Students will explore examples of CMS content, learn to navigate the interface, add tools and content, and perform basic course management functions. The course also emphasizes customizing and integrating emerging technologies into the CMS. Participants will learn to customize their courses, use communication tools, assessment tools, and course management tools.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**EDIT-024 - Women in Technology Units: 3**

Through a collaborative learning environment utilizing different application software, multimedia, web resources, and an online social network, students will explore the relationship between women and technology around the world, as well as the contributions women have made in technology. Students will identify effective strategies for extending access to technology for women in order to close the gender gap that maintains a male-dominated hold on advanced technology. They will also investigate the restrictions in technology education and technology careers for women.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**EDIT-026 - Women in STEM Units: 3**

Female participation and retention in science, technology, engineering and math (STEM) education and careers is an international issue with critical social, economic and political implications. In this course, students will learn strategies for women and girls to overcome the societal and cultural barriers to STEM careers and focus on narrowing the gender gap in STEM. Students will do so by exploring emerging technologies and their potential impact in increasing women's access and success in STEM education and careers.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**Engineering****ENGR-001 - Technology and Society Units: 3**

This course will explore the interrelationships between technology and the social sciences. Specifically, the course will investigate the societal factors which impact technology (historical, political, economic, ethical and environmental), and the ways in which technology affects society (language, art, music, psychology and sociology). This course is appropriate for students in both technical and non-technical majors.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: D District GE: D IGETC: 4

**ENGR-010 - Engineering Processes and Tools Units: 3**

This course introduces students to the engineering profession and devices, processes, and techniques utilized in solving engineering problems. Engineering designs and their impact on society, environment, and economics are emphasized. Design principles and methodology are a major focus of the course. The use of spreadsheets and mathematical software in engineering problem solving and data presentation are discussed. Engineering design process, report writing and technical presentations are practiced through term projects.

Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: MATH 021 or MATH 025, with a C or better

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ENGR-018 - Engineering Design and Graphics Units: 3**

This course covers the principles of design and its graphical presentation in engineering as well as computer-aided design (CAD) and programming. Major topics include the engineering design process, orthographic projection, multiview drawings, pictorial drawings, dimensioning and tolerancing, 3-D modeling, and Virtual Basic Application (VBA) programming. Engineering graphical presentation is based on American National Standards Institute (ANSI) standard. Students will learn to use CAD software in producing engineering drawings.

Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: MATH 014 with C or better or equivalent

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**ENGR-050 - Introduction to Computing Units: 4**

Students learn the fundamentals of computer assisted problem solving, as it applies to the solution of engineering problems. The four major themes of this course are algorithm development, efficient programming/modeling, PC device interfacing, and practical and user friendly pre/post processing techniques. The C++ programming language is used to obtain solutions to various engineering problems. Object oriented programming using subjects such as classes, pointers, inheritances, dynamic allocation of memory space, and standard template libraries are emphasized.

Lecture Hours: 3 Lab Hours: 3 Repeatable: No Grading: L

Prerequisite: MATH 071 with C or better

Recommended: Ability to use word processing and spreadsheet software; Completion of ENGR 010

**Advisory Level:** Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None



**ENGR-060 - Surveying****Units: 3**

Students learn the basic theory and practice of surveying or geomatics as related to engineering practices. Basic concepts, standards, errors and statistical handling are presented. Linear and angular measurements, profile leveling and traversing are discussed. The concepts of bearings and azimuths as well as related computations are explained. Theory, use and care of surveying instruments in establishing horizontal and vertical control are studied. In addition, students will gain practical experience through laboratory and field work.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 022, or SG 100 or equivalent, either with grade of C or better. Or, SG 100 may be taken concurrently.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-061 - Plane Surveying****Units: 3**

Students learn various plane surveys and calculations. The types of surveys covered include topographical, control, boundary and construction surveys. The public land survey system is discussed. The types of calculations include coordinate geometry computations, and area and volume calculations from survey data. Horizontal and vertical curve computations and layout are also discussed. Least-squares adjustments, GPS and GIS are introduced.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: ENGR 060 with C or better or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-063 - GIS for Civil Engineering and Surveying****Units: 3**

Students learn the fundamentals of Geographical Information System (GIS) as related to civil engineering and surveying and how the Multipurpose Cadastre (MPC), Land Information System (LIS) and GIS fit together. Geodetic reference frame, base map, cadastral overlay, and linkage mechanisms are also discussed. Data quality and accuracy, privacy, ethics, and institutional, governmental and technological issues associated with GIS are explored. The ArcGIS software is taught and used in the course. GIS applications and existing case studies are presented. Federal Geographical Data Committee (FGDC) standards and future trends of GIS are addressed.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: ENGR 060 and ENGR 018

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-066 - Properties of Materials****Units: 3**

Mechanical, thermal, electrical, magnetic and chemical properties of materials are studied. The effect of atomic and crystal structure and various bonding mechanisms on the above properties are discussed. Diffusion and phase analysis in various materials, and defects and failure in materials including the effect of heat treatment on the strength of materials are also investigated. Various laboratory experiments such as impact, tensile and compression, torsion, fatigue, corrosion, thermal conduction and expansion, electrical conduction, magnetic strength, composite structure, rubber and polymer resilience, and photomicrograph are conducted to provide enhanced knowledge of material properties.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: CHEM 001A and PHYS 004A, both with a C or better

Recommended: ENGR 010  
 Ability to use word processing & spreadsheet software

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-069 - Statics****Units: 3**

This course covers the equilibrium characteristics of various structures that are subject to external forces. The effects of various types of forces on the equilibrium of objects are discussed through the application of vector mechanics and the laws of Newton. Topics studied include two and three dimensional rigid structures, free-body diagrams, the concept of centroids, distributed load analysis, moment of inertia analysis, friction and virtual work. The structures considered are primarily trusses, machines and frames.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: PHYS 004A, with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-071 - Introduction to Circuit Analysis****Units: 4**

Analyses of DC and AC circuits are performed using Kirchhoff's voltage and current laws. Emphasis is given to resistive, capacitive, inductive, and amplifier circuits powered by independent and dependent sources. The transient nature of first order and second order circuits containing capacitors and inductors are studied. Thevenin's and Norton's theorems are applied to DC and AC circuits and properties of these circuits for maximum power transfer are determined. The concept of impedance is used to analyze AC circuits in the frequency domain as well as to perform power analysis.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 073 and PHYS 004B, both with C or better

Recommended: 1. MATH 078  
 2. Completion of ENGR 010 and 050  
 3. Ability to use word processing and spreadsheet software

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-138 - Occupational Work Experience****Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 1.81      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-500 - Introduction to Engineering****Units: None**

This course consists of a survey of the field of engineering including all aspects of activities and responsibilities of a practicing engineer. Various disciplines are introduced and preparation and skills needed to successfully complete an engineering education and compete in the profession are detailed. Some historical perspective is included in order to provide a comprehensive view of the field. Topics such as impact of engineering and technology on society, failures, successes, and current/future challenges are also included. This course is intended to provide a general overview of the engineering field to those who are planning on pursuing a technical career.

Lecture Hours: 1.5      Lab Hours: None      Repeatable: Yes      Grading: N

Recommended: Be able to use computers and the Internet.

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: NC  
 CSU GE: None      District GE: None      IGETC: None

**ENGR-502 - Basic Math Applications in Engineering Units: None**

This application-oriented course is for those who are interested in pursuing an engineering or engineering technology career. Problems and calculations encountered in technical areas such as manufacturing, computer aided systems, heating ventilation and air conditioning, engines and transmissions, structures, construction, laser and imaging technology, electrical and electronics are discussed and practiced through the use of appropriate basic math concepts. This course is intended to encourage and attract students into the STEM field by providing a basic training and understanding of how technical problems are solved using basic math concepts such as operations of fractions and decimals, percent, ratios and proportion, calculator usage, signed numbers, evaluating formulas, equation solving, geometry, the metric system, and measurement tools.

Lecture Hours: 2 Lab Hours: 3 Repeatable: Yes Grading: N

Recommended: Be able to use computers and the Internet.

**Advisory Level:** Read: 2 Write: 2 Math: None  
 Transfer Status: None Degree Applicable: NC  
 CSU GE: None District GE: None IGETC: None

**ENGR-504 - Technical and Contextualized Communication Units: None**

This course is designed to develop proficiency in specific integrated and contextualized reading, writing, visualization, and speaking skills and strategies relevant to technical and scientific professions. Topics include reading and writing processes, critical thinking strategies, recognition and composition of coherent and unified texts, effective visualization and public speaking. Through individual and collaborative projects, students will gain practice in researching, designing, and evaluating appropriate communications for varying rhetorical situations. Using both print- and computer-based technologies, students will develop abilities to create and critically analyze documents so that they engage and inform readers in a variety of circumstances.

Lecture Hours: 2 Lab Hours: 3 Repeatable: Yes Grading: N

Recommended: Be able to use computers and the Internet.

**Advisory Level:** Read: 2 Write: 2 Math: None  
 Transfer Status: None Degree Applicable: NC  
 CSU GE: None District GE: None IGETC: None

**ENGR-506 - Basic Principles of Engineering Units: None**

This course is a survey of basic principles and concepts used in engineering. Students are exposed to applications of these concepts in order to provide basic understanding of engineering design. It gives students the opportunity to develop skills and understanding of course concepts through hands-on activities, and problem-based learning. Topics include principles of power, energy, materials, electrical and electronics, chemical processes, structures, statics, kinematics, and software. Teamwork in performing projects is an essential component of the course which challenges students to continually improve their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts.

Lecture Hours: 2 Lab Hours: 3 Repeatable: Yes Grading: N

Recommended: Be able to use computers and the Internet.

**Advisory Level:** Read: 2 Write: 2 Math: None  
 Transfer Status: None Degree Applicable: NC  
 CSU GE: None District GE: None IGETC: None

**English****ENGL-001A - English Composition Units: 3**

English 001A is the first course in a transfer level sequence (English 001A, 001B) designed to equip students with the skills necessary for writing college level compositions. The course emphasizes expository writing, critical reading, and research techniques. Students are required to produce a series of academic essays including a documented research paper in conventional format. Analysis of readings and the practice of writing processes create the bases for student essays.

All English 001A students will take a Department Final which will be holistically scored by at least two faculty members and will represent 20% of their course grade.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: Continuing students must complete ((ENGL 104 or ENGL 092) and (ENGL 102 or READ 101)) or ESL 091; all with C or better. New students will be placed based on the results of assessment.

**Advisory Level:** Read: None Write: None Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: A2 District GE: A2 IGETC: 1A

**ENGL-001B - English Composition Units: 3**

English 001B, a second semester college composition course, emphasizes expository and argumentative writing directed toward an analysis of ideas and concepts from a wide variety of literature; English 001B includes discussion of fiction, drama, poetry, the essay, and other expository prose-- stressing critical reading in these genres. All English 001B students will take a Department Final which will be holistically scored by at least two faculty members and will represent 20% of their course grade.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: ENGL 001A with C or better

**Advisory Level:** Read: None Write: None Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: C2 District GE: C2 IGETC: 3B

**ENGL-001C - Critical Thinking/Composition Units: 3**

This course presents the elements of critical reasoning and logic. Students will learn to identify the basic structures of arguments and the ways people use language to fortify or to falsify arguments. Students will analyze and demonstrate these techniques by writing and critiquing essays and using research strategies. This course is specifically designed to meet the IGETC critical thinking requirement.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: ENGL 001A with C or better

**Advisory Level:** Read: None Write: None Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: A3 District GE: A3 IGETC: 1B



**ENGL-001D - Advanced College Reading****Units: 3**

In this transfer-level reading course, students will advance their reading effectiveness for academic, career, and personal growth. The course is designed to empower students to read difficult text at an in-depth level. Students will learn to summarize, to paraphrase, to understand descriptive and scientific language, to analyze writers' strategies, and to interpret abstract concepts. It will give them practice with a range of texts, including texts representing other college courses and primary source material relevant to the transfer major. This course can be taken after completion of English 102 and 104 or ESL 91; concurrently with English 001A; or after English 001A.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: (ENGL 102 or READ 101) and (ENGL 104 or ENGL 092) or ESL 091; all with C or better or placement based on assessment; course may be taken concurrently with ENGL 001A or after ENGL 001A.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-001L - English Composition Lab****Units: 0.5 - 1.5**

Students will learn and use critical thinking/writing skills needed for college level exposition, including paraphrasing, summarizing, development of complex content, revision, sentence techniques, research, evaluation, synthesis, and documentation of sources.

Lecture Hours: None      Lab Hours: 1.5 - 4.5      Repeatable: 9      Grading: K

Corequisite: ENGL 001A, or 001B, or 001C.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-021 - Introduction to Poetry****Units: 3**

This course emphasizes reading poetry for analysis and enjoyment. An appreciation of poetry is developed through discussion of theme, tone, imagery, poetic techniques, purpose, and versification.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL (104 or 092) and (ENGL 102 or READ 101) or ESL 091 all with C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-028 - Introduction to World Mythology****Units: 3**

The course investigates cross-cultural patterns of myths: gods and goddesses of earth and sky, hunt and harvest; the cycle of the hero; the creation, destruction, and renewal of the world; myths as potent forces today in literature and the arts as well as in everyday life.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL (104 or 092 ) and ENGL 102 or READ 101 or ESL 091; all with C or better or placement based on assessment.

Recommended: ENGL-001A

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-032 - Gender in Literature****Units: 3**

This introductory survey of literature focuses on the stereotyped and individualized characterizations of gender in multicultural literature, including fiction, nonfiction, poetry, drama, and film. Students will read, discuss, and write about literary images of men and women, representations of gender in literature, portrayals of gender-based attitudes and values, and the ways in which writing can change conventional views of gender.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL 102 and ENGL 104 or ESL 091 or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2, ES      IGETC: 3B

**ENGL-052 - Children's/Adolescent Literature****Units: 3**

This course traces the historical and cultural development of global literature for both children and adolescents, including its multiple origins and relationships from the oral tradition, myth, nursery rhymes, poetry, fables, folk tales, sacred literature, novels, and literature-related arts such as music, theater, games, film, pictorial arts, and television. The course stresses multicultural elements and ethnic writers as it emphasizes the importance of diverse literature on psychological, sociological, and cultural growth of American college students and children/adolescents in general.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 102 or READ 101 and ENGL 104 or ENGL 092) or ESL 091 all with a C grade or better, or placement based on assessment)

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-062 - Asian/Asian-American Literature****Units: 3**

This course introduces students to a variety of literary works from the Asian and Asian-American culture which are significant in illuminating the cultural experience of Asian Americans. It is designed to provide an awareness and understanding of the experiences and literary contributions of Asians and Asian-Americans by examining literary works from countries such as China, The Philippines, India, Japan, Korea, and Vietnam. (Satisfies the Ethnic Studies requirement for the Associate Degree.)

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL (104 or 92 ) and [ENGL102 or READ 101] or ESL 091 with a grade of C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2, ES      IGETC: 3B

**ENGL-072 - Fundamentals of Creative Writing****Units: 3**

Students will learn to create and analyze lucid, well developed pieces of fiction, short dramatic treatments and poetry. This course will focus on creative writing as a living art form through publication of student work in a literary magazine and performance of student writings through oral interpretation.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL 001A with C or better

Recommended: ENGL 001B / ENGL 001C

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-073 - Introduction to Shakespeare****Units: 3**

Students will study representative Shakespeare as a major figure in our literary heritage and will read selected works, including represented plays, sonnets and poems. Contributions of the Elizabethan era to Western Culture will be explored. The course is designed to heighten awareness of Shakespeare's literary contribution to society and the relationship of the student to his work.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 102 or READ 101) and (ENGL 104 or ENGL 092) or ESL 091; all with a C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-080 - Mexican-American Literature****Units: 3**

This course surveys selected Mexican-American authors to develop an awareness of the experiences and literary contributions of Mexican-Americans living in the United States. The course is designed to heighten critical awareness of the image of the Mexican-American in distinct genres of literature. The focus will be on works written from mid 20th century to the present.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: (ENGL 104 and ENGL 102) or ESL 091; all with C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2, D      District GE: C2, D, ES      IGETC: 3B

**ENGL-082A - African American Literature****Units: 3**

Students study the African-American experience in America as viewed through the literary works of African-American authors from slavery to 1930. The course is designed to analyze the various and unique social scientific approaches — namely the historical, the psychological, the sociological, the artistic and the philosophical — that African-American authors employ in exposing, exploring and, in general, informing an oftentimes unreceptive reading audience.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: ENGL (104 or 92) and ENGL 102 or READ 101, both with grade of C or better, or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2, D      District GE: C2, D, ES      IGETC: 3B

**ENGL-084A - Survey of American Literature I****Units: 3**

This course includes representative American literature from its beginning to 1865, including works of writers of the Colonial, Revolutionary, and Romantic periods, with some emphasis on social and cultural backgrounds.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 092 or ENGL 104) and (ENGL 102 or READ 101), all with C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-084B - Survey of American Literature II****Units: 3**

This course includes representative American literature from the late 19th Century to the present, including works of writers of the Realist, Naturalist, Modernist, and Contemporary movements, with some emphasis on social and cultural backgrounds.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 092 or ENGL 104) and (ENGL 102 or READ 101), all with C or better or placement based on assessment.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-086A - Survey of English Literature I****Units: 3**

This is the first part of a two-part series surveying the development of English (Anglophone) Literature from the earliest writings in English to the Restoration and 18th Century. Students will read and discuss significant examples of epic, lyric, drama and prose writings of the finest authors writing in England and the British Empire from the Anglo Saxon, Anglo-Norman, Middle English, Renaissance, Restoration and 18th Century periods. The course will contain lectures, discussions, group work, and other student-centered learning activities. Evaluations will be based on in- and out-of-class analytical essays, exams, research reports, and class work.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 092 or ENGL 104) and (ENGL 102 or READ 101), all with C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-086B - Survey of English Literature II****Units: 3**

This is the second part of a two part series surveying the development of English (Anglophone) Literature from the 18th Century to the present. Students will read and discuss significant examples of epic, lyric, drama and prose writings of the finest authors writing in England and the British Empire from the Romantic, Victorian, Edwardian, Modern and Postmodern periods. The course will contain lectures, discussions, group work, and other student centered learning activities. Evaluations will be based on in- and out-of-class analytical essays, examinations, research reports, and class work. This course is required for the English Major at EVC.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 092 or ENGL 104) and (ENGL 102 or READ 101), all with C or better or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**ENGL-099 - Grammar for Writers: WST Preparation****Units: 3**

This course is designed for students who have passed English 001A, but still require improvement and refinement in grammar, composition, and critical thinking skills. Upon successful completion, the student should attain and surpass the levels necessary for success in passing CSU Writing Skills Tests and for upper division work. English 099 focuses on writing structure and the creative process: mechanics, and composition. It is designed to instruct students in writing the full range of appropriate and effective English sentences, paragraphs, and essays. Basic concepts of the appropriateness of certain structures to specific content are emphasized.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ENGL 001A with C or better

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None



**ENGL-102 - College Reading****Units: 3**

English 102 enhances college reading skills and study techniques using academic materials in a variety of disciplines such as the natural sciences, social sciences, humanities and business. Instruction includes literal and interpretive comprehension, rate flexibility, vocabulary expansion, and beginning research. All students in English 102 are strongly encouraged to complete a 0.5 unit of lab work per semester in the Reading Lab. Concurrent enrollment in English 104 is recommended.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 302 or ENGL 322 or READ 301, all with P; or placement based on assessment.

Recommended: Concurrent enrollment in ENGL 104.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-102L - College Reading Lab****Units: 0.5**

The reading lab offers individualized programs in reading development plus supplemental reading skills work for students enrolled in English 102, College Reading. Students make use of a wide range of audiovisual and self-instructional materials to improve their reading proficiency. This lab may be repeated for credit to a maximum of 2 units. Concurrent or previous enrollment in English 102 is required.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Prerequisite: ENGL 322 or placement based on assessment.

Corequisite: ENGL 102

Recommended: Concurrent enrollment in ENGL 104

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-104 - Fundamentals of Composition****Units: 4**

English 104 is an introduction to academic discourse and to writing short essays. The course develops competence in analytic reading and expository writing. The course stresses paragraph and essay structure through the use of pre-writing, revision, editing, and peer review strategies. Competence in English usage and syntactic variety will also be developed. Students will respond to culturally relevant model writings for general, academic, and special audiences. English 104 includes a three-hour weekly writing lab, which determines 25% of each student's final course grade. Twenty percent of each student's grade will be based on a department final essay exam. The course meets the pre-requisite for ENGL-001A.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: K

Prerequisite: ESL 302 or ENGL 322 or READ 301 and (ENGL 330 or 335); all with C or placement based on assessment.

Corequisite: XENGL 104L

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-321 - Fundamentals of Reading****Units: 1 - 3**

English 321, a variable unit course, develops fundamental reading skills using lectures and an individualized approach. Emphasis is on vocabulary development, comprehension improvement and basic techniques of study. 3.0 units are needed to complete the course. The course may not be used to satisfy the written English requirement for an Associate degree. Concurrent enrollment in English 321 Lab is highly recommended.

Lecture Hours: 1 - 3      Lab Hours: None      Repeatable: 2      Grading: K

Recommended: ENGL 341

Open Curriculum: An assessment test is required prior to first day of class

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-321L - Reading Laboratory****Units: 0.5 - 1**

English 321L is a lab designed to supplement the reading skill development covered in English 321. The lab is individualized and uses a variety of self-paced instructional materials. Students receive assignments to enhance skill development based on the English 321 lecture class. Concurrent or prior enrollment in English 321 is required.

Lecture Hours: None      Lab Hours: 1.5 - 3      Repeatable: 1      Grading: K

Corequisite: ENGL 321

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-322 - Introduction to College Reading****Units: 3**

This course strengthens and expands reading and study skills using a variety of teaching approaches and materials. It develops vocabulary, complex comprehension, and study/reference skills. All students in English 322 are strongly encouraged to complete a 0.50 unit per semester in the Reading Lab. Concurrent enrollment in English 330 is recommended.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Credit by Exam: Yes

Prerequisite: Completion of ((ENGL 321 (3 units) and ENGL341)) or READ 350 or (ESL 312 and ESL 313) all with a P, or placement based on assessment.

Recommended: Concurrent enrollment in ENGL 330.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-322L - Introduction to College Reading Lab****Units: 0.5**

English 322L offers additional practice in vocabulary and comprehension for students enrolled in English 322. Students make use of a wide range of materials to improve their reading skills. Concurrent enrollment in English 322 is required.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Prerequisite: 3 units of ENGL 321 with P grade or placement based on assessment.

Corequisite: ENGL 322

Recommended: Concurrent enrollment in ENGL 330

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ENGL-330 - Improvement of Writing****Units: 4**

English 330 is devoted to developing competence in writing standard English sentences, paragraphs, and short compositions by means of a study of grammar and practice in writing. Successful completion of both the lecture and writing center component of this course is required. Students will take a Department Final Exam which will be holistically scored by at least two faculty members and will represent 20% of their course grade.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: K

Prerequisite: ENGL 321 and ENGL 341, or ESL 312 and ESL 313, all with a P grade or placement based on assessment.

Corequisite: XENGL 330L

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None



**ENGL-341 - Sentence/Paragraph Development Units: 3**

This course focuses on assisting students in developing strong grammar skills by emphasizing correct use of word forms, parts of speech, and basic sentence structure. Ultimately, student competence in sentence skills will help them to link sentences into a unified paragraph. The course may not be used for satisfaction of English requirements for the Associate degree, but it is a prerequisite for students who place below the English 330 level on the College Placement Test.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Open Curriculum: An assessment test is required prior to first day of class

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**English as a Second Language****ESL-091 - College Reading and Writing 2 Units: 6**

Students will study patterns of essay organization, relationships of paragraphs within essays, author's purpose, audience, tone, and mood. Student will read materials that highlight cross-cultural content and contemporary issues. Students will also acquire skills in the development and organization of ideas in coherent, well-developed paragraphs and in writing essays that require research. Concurrent enrollment in ESL 091L is required for computer-assisted and instructor-guided practice. This course is designed for non-native speakers of English one level below English 1A.

Lecture Hours: 6      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 302 with P grade or placement based on assessment

Corequisite: ESL 091L

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-091L - ESL Skills Development Lab Units: 0.5**

The content of this lab will facilitate skills development for the ESL 091 courses. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with materials previously assigned by the ESL instructor, or to write essays for individual critiques by an ESL instructor. Students must enroll concurrently in ESL 091.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Corequisite: ESL 091

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-302 - Introduction to College Reading and Writing Units: 6**

Students will focus on writing essays that exhibit the depth and complexity of low-advanced language level academic texts. They will study language elements used to present clear and effective thesis statements. They will evaluate a variety of texts that demonstrate the ways writers express ideas for a variety of purposes and intent. Students will also continue to improve skills in academic and extensive reading, critical thinking, and vocabulary acquisition. Reading materials will highlight current issues and topics of interest across cultures including articles, essays, and literary works. This course is designed for non-native speakers of English two levels below English 1A.

Lecture Hours: 6      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 312 and ESL 313, both with P grade or placement based on assessment

Corequisite: ESL 302L

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-302L - ESL Skills Development Lab Units: 0.5**

The content of this lab will facilitate skills development for ESL 302 courses. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with materials previously assigned by the ESL instructor to write essays for individual critiques by an ESL instructor. Students must enroll concurrently in ESL 302.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Corequisite: ESL 302

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-310L - ESL Skills Development Lab Units: 0.5 - 1**

The content of this lab will facilitate skills development for the ESL 310 series. It is designed to supplement classroom instruction (in the ESL 310 series) by providing students the opportunity to work on an individual basis with materials developed for the ESL 310L course. Students utilize computer software programs, workbooks, and other supplementary materials to develop and improve their skills in listening comprehension, oral production, reading, writing and vocabulary development. Students must be enrolled concurrently in ESL 312, 313, or 314. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable to a maximum of 1 unit.

Lecture Hours: None      Lab Hours: 1.5 - 3      Repeatable: 1      Grading: K

Corequisite: Concurrent enrollment in ESL 312 or ESL 313 or ESL 314

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-312 - Introduction to the Essay Units: 5**

Students read and write compositions of multiple paragraphs and short essays on academic topics to acquire grammar, writing, and vocabulary skills for college-level academic work. Concurrent enrollment in ESL 312L is required for computer-assisted grammar and writing practice with lab assistance. ESL 312 is a high-intermediate writing course for non-native speakers of English three levels below English 1A.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 322 and ESL 323 and ESL 324, all with P grade or placement based on assessment.

Corequisite: ESL 312L

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-312L - ESL Skills Development Lab Units: 0.5**

The content of this lab will facilitate skills development for the ESL 312 course. It is designed to supplement classroom instruction by providing students the opportunity to work on an individualized basis with software and web-based materials previously assigned by the ESL instructor, to attend workshops on grammar and composition, and to receive individual critique by an ESL instructor on assignments written for ESL 312.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Corequisite: ESL 312

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-313 - Introduction to College Reading Units: 3**

This course is designed for non-native speakers at a high-intermediate level of English proficiency. Course content prepares students to read and respond to college-level texts, demonstrating literal and critical comprehension, and to expand vocabulary for academic purposes. Concurrent enrollment in ESL 312, ESL 314, and ESL 310L is recommended.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K

Prerequisite: (ESL 322 and ESL 323 and ESL 324) or ENGL 321, all with P grade, or based on assessment

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-314 - Intermediate-High Listening and Speaking Skills Units: 3**

This course refines listening comprehension and speaking skills in academic, vocational, and social contexts at the high intermediate level.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K

Prerequisite: ESL 324 with P grade or placement based on assessment

Recommended: Concurrent enrollment in ESL 310L is highly recommended.

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-316 - Grammar for Writers 1 Units: 3**

This is an intensive grammar course for ESL writers at a high-intermediate level of language proficiency. Course content focuses on a wide range of grammatical and syntactical structures in meaningful contexts and builds accuracy and fluency in oral and written discourse.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K

Prerequisite: ESL 322 with P grade or placement based on assessment

Recommended: Concurrent enrollment in ESL 310L is highly recommended.

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-317 - English Pronunciation 3 Units: 3**

Students develop native-like speech in English. They utilize the International Phonetic Alphabet to distinguish the sounds of English and produce natural-sounding speech in connected discourse. They learn different intonation, stress, and pitch patterns to change sentence focus and to signal middle and end of sentences. They use contractions and reductions and assimilate sounds to produce natural speech. Concurrent enrollment in (ESL 312 or ESL 313 or ESL 314) and ESL 207 is strongly recommended.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K

Prerequisite: Successful completion of ESL 324 or ESL 327 or placement based on assessment

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-320L - ESL Skills Development Lab Units: 0.5 - 1**

The content of this lab will facilitate skills development for the ESL 320 series. It is designed to supplement classroom instruction in the ESL 320 series by providing students the opportunity to develop and improve their skills in listening comprehension, oral production, reading, writing, and vocabulary development. Students utilize English Interactive computer software program. Students must be enrolled concurrently in ESL 322, 323, or 324. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable to a maximum of 1.0 units.

Lecture Hours: None Lab Hours: 1.5 - 3 Repeatable: 1 Grading: K

Corequisite: Concurrent enrollment in ESL 322, ESL 323, or ESL 324

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-322 - Paragraph Development Units: 5**

ESL 322 is an intermediate writing course for non-native speakers of English. Students will focus on writing well organized and fully developed paragraphs with correct grammar, sentence structure and word choice. Concurrent enrollment in 0.5 unit of ESL 320L is strongly recommended for computer grammar and writing practice and instructional assistance.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: K

Prerequisite: ESL 332 and ESL 333 and ESL 334, all with P or placement based on assessment.

Recommended: Concurrent enrollment in ESL (323 or 324 or 327) and ESL 194 is strongly recommended

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-323 - Reading and Vocabulary Development Units: 3**

This course is designed for non-native speakers at an intermediate level of proficiency in English. Course content and materials focus mainly on reading comprehension and vocabulary development. Integration of discussion and writing activities is also emphasized. Concurrent enrollment in ESL 322, ESL 324, and ESL 320L are recommended.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: K

Prerequisite: ESL 333 with P grade or placement based on assessment

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-324 - Listening and Speaking Skills Development Units: 4**

Students will focus on developing academic listening and speaking skills at an intermediate-mid level of language proficiency. Students will also acquire idiomatic and academic vocabulary, cultural awareness, and discussion skills through the use of multimedia materials.

Lecture Hours: 4 Lab Hours: None Repeatable: No Grading: K

Prerequisite: ESL 334 with P grade or placement based on assessment

Recommended: Concurrent enrollment in (ESL 322 or 323 or 327) and ESL 320L is strongly recommended

*Advisory Level:* Read: None Write: None Math: None  
 Transfer Status: None Degree Applicable: NAA  
 CSU GE: None District GE: None IGETC: None

**ESL-327 - English Pronunciation 2 Units: 3**

Students further their study of the pronunciation, intonation, stress, and rhythm patterns of English. They are introduced to the phonetic alphabet and study the sound-spelling correlations of English. They also receive further instruction on the production of sounds in word-initial and word-final environments, intonation and stress patterns in multi-syllabic words, and native-like sentence stress, rhythm and intonation. Concurrent enrollment in (ESL 322 or ESL 323 or ESL 324) and ESL 207 is strongly recommended.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: Successful completion of ESL 334 or ESL 337 or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-330L - ESL Skills Development Lab Units: 0.5 - 1**

The content of this lab will facilitate skills development for the ESL 330 series. It is designed to supplement classroom instruction in the ESL 330 series by providing students the opportunity to develop and improve their skills in listening comprehension, oral production, reading, writing, and vocabulary development. Students utilize English interactive computer software program and workbooks to improve these skills. Students must be enrolled concurrently in ESL 332, 333, or 334. Twenty-four hours of lab work are required for each 1/2 unit of credit. Repeatable to a maximum of 1.0 unit.

Lecture Hours: None      Lab Hours: 1.5 - 3      Repeatable: 1      Grading: K

Corequisite: Concurrent enrollment in ESL 332, ESL 333, ESL 334, or ESL 337

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-332 - Basic Writing Skills 2 Units: 4**

This is a low-intermediate grammar/writing course for non-native speakers of English. Students learn grammar and writing techniques for composing sentences and short paragraphs.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 342 or ESL 345 with a P or placement by assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-333 - Basic Reading Skills 2 Units: 3**

This course is designed for non-native speakers who are at a low-intermediate level of proficiency in English. Course content and materials expand reading and vocabulary skills by focusing on literal and critical comprehension of text. Development of speaking and writing skills through interactive class activities is also emphasized. Concurrent enrollment in ESL 332, ESL 334, and ESL 330L is recommended.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 343 or ESL 346 with P grade or placement based on assessment

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-334 - Basic Listening/Speaking 2 Units: 5**

Students will learn listening and speaking skills at the intermediate-low level of English proficiency. Students will participate in class activities and use multimedia materials focused on aural comprehension, oral communication, and clear pronunciation in a variety of contexts.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: ESL 344 or ESL 347 with P grade or placement based on assessment

Recommended: Concurrent enrollment in ESL 332 and/or ESL 333 is strongly recommended.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-337 - English Pronunciation 1 Units: 3**

Students are introduced to articulatory phonetics and basic intonation, stress, and rhythm patterns of English. Students will study the place and manner of the articulation of the sounds of English and spelling patterns for vowel and consonant sounds. Students will also be introduced to rhythm, stress, and intonation patterns, in English. Concurrent enrollment in (ESL 332 or ESL 333 or ESL 334) and ESL 207 is strongly recommended.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: Placement based on assessment or satisfactory completion of ESL 347

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-341L - ESL Skills Development Lab Units: 0.5 - 1**

The content of this lab will facilitate language skill development for students enrolling in the ESL entry level courses by providing computer-assisted language instruction and workbooks. Students will work on an individualized basis, with assistance from staff as needed, to enhance language skills. It is highly recommended that students be enrolled concurrently in any ESL 340 series course. Repeatable to a maximum of 1.0 unit

Lecture Hours: None      Lab Hours: 1.5 - 3      Repeatable: 1      Grading: K

Recommended: Concurrent enrollment in any ESL 340 series courses strongly recommended.

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-345 - Basic Writing Skills 1 Units: 4**

ESL 345 is a novice-high grammar and writing course for non-native speakers of English. Students will study the grammar and syntax of written discourse in sentences and short passages. Students will learn how to write, revise, and edit a variety of sentences and short paragraphs.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**ESL-346 - Basic Reading Skills 1****Units: 3**

ESL 346 is a novice-high reading course for non-native speakers of English. Students learn comprehension skills such as identifying and distinguishing main ideas and details and finding meaning of new words through context clues. Students also develop post-reading strategies such as paraphrasing important information and brief writing responses to readings.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

**ESL-347 - Basic Listening and Speaking 1****Units: 5**

ESL 347 is a novice-high listening/speaking course for non-native speakers of English. Students will learn listening skills such as listening for main idea and details, phonemic differences, intonation and stress patterns, and sound reductions. Students will also learn speaking skills at novice-high level of restatement of important information, use of key words and phrases in questions and statements, description of speakers' opinions and feelings, and pronunciation of phonemic pairs, stress patterns, and sound reductions.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

**Advisory Level:**      Read: None      Write: None      Math: None  
**Transfer Status:** None      Degree Applicable: NAA  
**CSU GE:** None      District GE: None      IGETC: None

***Environmental Science*****ENVIR-010 - Environmental Science****Units: 4**

This is an interdisciplinary course in which students examine the interaction between human societies and the environment. Students will study important physical and biological properties necessary for life on Earth. They will explore major issues that are bound to affect the future of humans on our planet including population growth, resource exploitation, pollution, climate change, and the loss of biodiversity. Students will also consider environmental policies and the prospects for a sustainable future. Field trips may be required. ENVIR-010 meets general education requirements for science with a lab and can be counted as either a life science or as a physical science course.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: 3  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** B1,B2,B3      District GE: B1,B2,B3      IGETC: 5A,5B, 5C

***Ethnic Studies*****ETH-010 - Introduction to Ethnic Studies****Units: 3**

This interdisciplinary course is a combination of the humanities and social sciences. There is an emphasis on the learning of concepts and theories central to the study of Ethnic Studies. The class will also explore the culture concept. Included is an analysis of the interrelationship between the dominant group and various ethnic groups. This course will also serve as an introduction to the experiences and perspectives of selected racial/ethnic group relations in our society.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** C2, D      District GE: C2, D ,ES      IGETC: 4

**ETH-011 - Ethnic Film: Reel Studies****Units: 3**

This course will examine contemporary and classic cinema, focusing primarily on US ethnic films from African- American, Native American, Latino, Asian-Pacific Islander, and Middle Eastern American cultures, as a tool to explore universal human themes as well as ethnic/cultural stereotypes.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** C1, D      District GE: C1, D, ES      IGETC: 3A, 4

**ETH-020 - African American Culture****Units: 3**

This course is a survey of the African American experience in the United States. Students will critically examine past, present and evolving socio-political, economic and cultural dynamics that help to create African American culture.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** C2, D      District GE: C2, D ,ES      IGETC: 3B, 4

**ETH-030 - Chicana/o Culture****Units: 3**

This is a survey course designed to study the development of Mexican and Chicana/o culture in Mexico, the Southwest U.S. and beyond. Emphasis will be placed on the cultural history as well as the socio-psychological aspects in the study of people of Mexican origin. Specific areas of interest in the course include theory and analysis of the concept of culture and its application to the Mexican and Chicano communities. Other areas of interest include the Pre-Columbian period, the religions and philosophies, art, language, music, folklore, and lifestyles of the Chicana/o.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** C2, D, ES      District GE: C2, D, ES      IGETC: 3B, 4

**ETH-035 - Sociology of the Chicana/o Experience****Units: 3**

This course focuses on Chicanas/os and their relation to U.S. society. It will address some critical areas of the Chicana/o experience in terms of economics, labor, immigration, stereotypes, religion, and police-Chicano conflict. In order to provide a real world analysis of the contemporary role of the Chicana/o in society, this course will focus on the Chicana/o community of San Jose. A central objective of the course is to base both skill development and content on the issues that are of personal and academic interest to the student. The ultimate objective is to use this analysis to come up with strategies for addressing the needs of the Chicana/o and other communities with similar circumstances.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
**Transfer Status:** CSU/UC      Degree Applicable: AA/AS  
**CSU GE:** D      District GE: D, ES      IGETC: 4

**ETH-040 - Vietnamese American Culture and Experience Units: 3**

This course provides students with a basic theoretical background to study the ancestral origin of Vietnamese Americans, their migration to the U.S., and assimilation into U.S. culture and society. It follows the evolution of their cultural roots into their ethnic heritage, focusing on their religious and philosophical thoughts, customs, and value system. The course traces the emergence of their minority status, identity, and sense of community, and explores their current status and prospects of ethno-social mobility through education, employment, business, entrepreneurship, and politics. This course reflects the Humanities and Social Science areas.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2, D      District GE: C2, D ,ES      IGETC: 4

**ETH-042 - Asian Pacific American (APA) Culture and Experience Units: 3**

This course covers (1) the Asian backgrounds, migration, ethnic culture (particularly major religious beliefs, philosophical thoughts, value system, customs, and traditions), and American experiences APAs as a whole have in common; (2) unique aspects of each Asian American co-group, with more emphasis on the six largest groups: Chinese, Filipino, Indian, Vietnamese, Korean, and Japanese Americans. Also of special importance are key concepts, theories, and perspectives pertinent to this study, as well as American experiences APAs share with other U.S. racial groups, especially African American and Latino Americans. This course is a combination of the Humanities and Social Sciences.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2, D      District GE: C2, D ,ES      IGETC: 4

***Family and Consumer Studies*****FCS-019 - Nutrition Units: 3**

This course provides students an introduction to basic nutrition principles, including physiological, psychological and sociological considerations. Students will analyze the human diet in relation to health, lifestyle choices, personal behaviors, and disease prevention. Individual recommended nutrient intake, the body's use of nutrients, and optimum dietary health across the lifespan will be discussed. Students will also examine the influence of culture, food supply, food choices, and nutritional status, as well as socioeconomic conditions, food fads, and diet fallacies.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: (ENGL 092 and READ 101) or ESL 091; all with C or better

*Advisory Level:*      Read: None      Write: None      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**FCS-050 - Life Management Units: 3**

Life Management provides individuals with skills for understanding and using resources for effective functioning now and in the future. Students will explore day-to-day resources including time, energy, and money. Major topics include steps in value clarification, goal setting, decision making, problem solving, time management, health, money management, education and career planning, communication skills, handling change and stress, and conflict management. In addition, the course explores the effect of cultural forces and future trends on goals, values, standards, and time management.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**FCS-070 - Child Development Units: 3**

Students will study the child from the prenatal period through adolescence. The physical, social-emotional and cognitive aspects of development are explored. This course is required for ECE majors and recommended for nursing and psychology majors, and anyone wanting to understand the development of children. Transferable: Equivalent to C.D. 60 at SJSU.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL 092 and READ 101 or ESL 091; all with C or better

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E      IGETC: None

**FCS-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 15      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***French*****FREN-001A - Elementary French Units: 5**

This course concentrates on developing basic skills in listening, reading, speaking and writing. Emphasis is placed on acquisition of vocabulary, structures and grammatical patterns necessary for comprehension of native spoken and written French at the beginning level. This course includes discussion of French culture and daily life. Concurrent enrollment in French 001AL is required. This course corresponds to two years of high school study.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: O

Corequisite: FREN 001L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A

**FREN-001AL - Foreign Language Lab - French 1A Units: 0.5**

The Foreign Language Lab supplements classroom instruction for French 001A. The students will use textual and other instructional media to improve fluency, comprehension and written expression in the target language.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Corequisite: FREN 001A

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**FREN-001B - Elementary French****Units: 5**

Students continue to develop skills in listening, reading, speaking and writing. Students acquire vocabulary and grammatical structures and patterns necessary for comprehension of standard spoken and written French.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: FREN 001A with C or better

Corequisite: FREN 001L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A, 3B

**FREN-001L - Foreign Language Lab****Units: 0.5**

Elementary French Lab supplements classroom instruction in French 001A and French 001B. Students use audiocassettes and/or computer programs for oral, aural, and written drill. Repeatable to a maximum of 1 unit.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Corequisite: FREN 001A or FREN 001B

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Geography*****GEOG-010 - Introduction to Physical Geography****Units: 3**

This course is an investigation of our relationship to the physical environment (atmosphere, weathered climate, water, landforms, soils, and biosphere) and their reciprocal relationships. Spatial location is emphasized. Maps, globes, and atlases are used. Field trips may be required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

***Guidance*****GUIDE-110A - Listening Skills****Units: 1**

This course is geared toward students with listening difficulties resulting from learning disabilities, language, cognitive communication, and auditory processing disorders, who require special assistance in order to pursue regular college courses. Students will learn listening strategies that include organization and processing verbally presented material. Instruction is carried out in small group classes. Reenrollment is based on continuing progress as measured by standardized tests and/or professional evaluation.

The instructor will meet the minimum qualification set forth in section 53414 of Title 5 regulations.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**GUIDE-110B - Memory and Study Skills****Units: 1**

This course is geared toward students with memory difficulties resulting from learning disabilities, language, cognitive communication, and memory disorders, who require special assistance in order to pursue regular college courses. Instruction is carried out in small group classes. Re-enrollment is based on continuing progress as measured by standardized tests/and/or professional evaluation.

The instructor will meet the minimum qualification set forth in section 53414 of Title 5 regulations.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**GUIDE-110C - Speech and Language Assessment****Units: 0.5**

Guide 110C is geared toward students who want to be assessed for specific speech, language, cognitive communication, and / or hearing disorders. This course is recommended for students who may require special assistance in order to pursue regular college courses. Complete speech/language evaluation is performed to determine student cognitive communication deficits and provide the basis for assistance. Instruction is done in the classroom.

The instructor will meet the minimum qualifications set forth in section 53414 of Title 5 regulations

Lecture Hours: None      Lab Hours: 1.5      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**GUIDE-150 - Adaptive Word Processing****Units: 2**

This is an introductory word processing class that addresses the needs of students with various disabilities who may require extensive training and/or the use of adaptive computer hardware and/or software in order to successfully use computers.

Lecture Hours: 1.5      Lab Hours: 1.5      Repeatable: No      Grading: K

Recommended: Knowledge of the keyboard.

*Advisory Level:*      Read: 1      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

***Health Education*****HED-011 - Dynamic Health Concepts****Units: 3**

This course surveys current health issues. Topics include the latest information on defining health; global and national health issues; mental health; use of tobacco, alcohol and illicit drugs; nutrition; common infectious and non infectious diseases including risk factors and prevention; human sexuality; and environmental health issues. Primary emphasis is directed to the individual's total emotional, intellectual and social health across the life span. Students are empowered to make intelligent, analytical decisions related to personal and community health. This course meets the Health Education requirement for California Teaching Credentials.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**HED-012 - Global Health Issues****Units: 3**

This course presents a comprehensive look at global health issues, including a review of ecological principles, environmental, infectious and non-infectious conditions, maternal and child health issues, as well as other health issues related to economic development in the developing world.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: HED 011 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***History*****HIST-001 - Survey of American History****Units: 3**

This course surveys the development of U.S. History in a broad approach to the social, constitutional, economic and political history of the U.S. with emphasis upon key events, issues and their backgrounds. Note: Combined with Political Science 001, this course meets U.S. History & Constitution and State and Local Government requirements.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, US-1      District GE: D, US-1      IGETC: 4

**HIST-003A - World History to 1500****Units: 3**

This course introduces students to the world's regions and civilizations as interconnected entities. The course examines the fundamental economic, social, political, and ideological elements of human culture in historical context. This course is intended to take a thematic approach, which introduces the students to the ideas/accomplishments of significant men and women in each period and region. The growth and development of traditional civilizations to 1500 are covered.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-003B - World History From 1500****Units: 3**

This course introduces students to the world's regions and civilizations as interconnected entities since 1500. The course examines the fundamental economic, social, political, and ideological elements of human culture in historical context. This course is intended to be a thematic approach, which introduces the students to the ideas and accomplishments of significant men and women in each period and region.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-010A - Development of Western Culture I****Units: 3**

This course covers the political, cultural, and philosophical development of Western culture and society through the study of the institutions, thought, literary and artistic expression of the ancient world and medieval society of Europe to the Reformation (1600 C.E.). Emphasis is placed on understanding the facets of modern civilization by tracing the social, cultural, and political thought of the past. This course is intended to be a chronological approach which introduces the students to the ideas and accomplishments of significant men and women in each period.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: C2, D      IGETC: 3B, 4

**HIST-010B - Development of Western Culture II****Units: 3**

This course covers the political, cultural, and philosophical development of Western culture and society through the study of the institutions, thought, literary and artistic expression since 1600. Emphasis is placed on understanding the facets of modern civilization by tracing the social, cultural, and political thought of the past. This course is intended to be a chronological approach which introduces the students to the ideas and accomplishments of significant men and women in each period.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: C2, D      IGETC: 3B, 4

**HIST-012 - East Asian History****Units: 3**

This course is a developmental survey of the major cultures of East Asia, including the history, institutions and artistic expressions of China, Korea, and Japan from the ancient period to the present. This course will illustrate not only the regional differences of East Asia, but also the commonalities that are shared, especially with regard to the major Asian philosophies and religions.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-014 - Women in American History****Units: 3**

This is a historical survey course about women in the United States from pre-Columbian to present times. The course will analyze the social, political, and economic aspects of women's lives. Also, the course will examine the interaction of race, class, ethnicity and gender. This course will be taught in the form of lectures, readings and discussions of primary and secondary sources, essays, quizzes, oral presentations and exams. Combined with Political Science 001, this course meets US History, Constitution and American Ideals requirement.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D, ES, US-1      IGETC: 4

**HIST-015 - South Asian History Since 1947 Units: 3**

This course examines the political, social, economic, and cultural history of the South Asian subcontinent from independence in 1947 to the present. The focus is upon India, Pakistan and Bangladesh, with Sri Lanka, Nepal and Bhutan also examined when appropriate. The course also situates South Asian history in its local, regional and global contexts in a survey of the tumultuous events of the last half-century.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-017A - History of the United States Units: 3**

This course surveys the political, economic, cultural, social, and intellectual development of the United States. The course emphasizes the interactions among Europeans, Africans, and American Indians in North America beginning with European colonization, through the creation of the U.S. Republic, its expansion west, and the developments leading up to the Civil War and Reconstruction. Along with History 017B or History 045, it meets the District requirement in United States History and Constitution and state and local government. History 001 may not be combined with either History 017A or History 017B to meet the requirement in United States History, Constitution and American Ideals.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, US-1, US-2      District GE: D, US-1, US-2      IGETC: 4

**HIST-017B - History of the United States Units: 3**

This course surveys the political, economic, cultural, social and intellectual development of the United States from Reconstruction to the present. The course emphasizes the U.S. expansion to the Pacific, its rise as a superpower through WW I and WW II, and the Cold War. Students will examine the role of major ethnic, gender and social groups in U.S. history. Along with History 017A, it meets the requirement in United States History, Constitution and state and local government. History 001 may not be combined with either History 017A or History 017B to meet the graduation requirement in United States History, Constitution and American Ideals.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, US-1, US-3      District GE: D, US-1, US-3      IGETC: 4

**HIST-021 - African American History Units: 3**

This historical survey course examines the formation of African Americans from their time in captivity to their establishment as citizens who shaped the economic, political, social actions and consciousness of the nation. Combined with Political Science 001, this course meets US History, Constitution, and American Ideals requirement.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, US-1      District GE: D, ES, US-1      IGETC: 4

**HIST-022 - Mexican-American History Units: 3**

This course presents an historical overview of the Mexican-American experience beginning with Pre-Columbian history to the present. Emphasis will be on addressing the Indigenous contributions to the culture, Spanish conquest of Mesoamerica, exploitation of land, people and resources, occupation of the Southwest, and the dynamics between Anglo-Americans and Mexican-Americans.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D, ES      IGETC: 4

**HIST-040 - United States Military History Units: 3**

This course is a survey of American Military History from 1775 to the present. All major American conflicts are reviewed as well as an examination of the influence of the military upon foreign policy, domestic affairs and diplomacy. It examines the reasons, causes, and legal limitations of war, as well as various doctrines developed since the American Revolution.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-045 - Post-1945 America Units: 3**

This is a survey course of the United States from the end of World War II to the present. The course will focus on the political, economic, social, and cultural developments in America following the war. It will emphasize the Cold War, America's emerging role as a superpower, the emergence of civil rights, global capitalism, mass culture, and the evolving political contest between liberalism and conservatism. Combined with History 017A, History 045 meets the graduation requirement in United States History, Constitution and American Ideals.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**HIST-099 - History Fundamentals Units: 3**

This course is intended for history majors as an introduction to the skills, technology and technique of reading, writing and researching history.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**Humanities****HUMNT-002 - Introduction to World Literature Units: 3**

Students are introduced to a variety of literary works from around the world, from the 17th to the 21st century which are significant in illuminating both the universality and diversity of human experience. Readings in this course are chosen for their literary, historical, cultural, philosophical, and psychological importance.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL 102 and ENGL 104 or ESL 091 all with C or better or assessment

Advisory Level:      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**Individualized Instruction****II-090 - Tutor Training Units: 1**

This course will help students gain knowledge about tutoring in order to provide effective academic assistance to others. Students will learn a variety of tutoring techniques which will address different learning styles, study skills and discipline specific needs. Students who are employed as a tutor in any of the EVC Tutoring Centers are required to complete this course. This course is also recommended for any student who intends to pursue a profession in teaching.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: O

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**II-210 - Supervised Tutoring Units: None**

Under the direction of a certificated supervisor in the Tutoring Center, students taking this course will receive tutoring assistance in areas of identified academic need. With the recommendation of appropriate faculty, tutors will be employed who have demonstrated competency in a particular subject, skills and/or discipline and who have or will successfully complete the tutor training course.

Lecture Hours: None      Lab Hours: None      Repeatable: Yes      Grading: N

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level:      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NONC  
 CSU GE: None      District GE: None      IGETC: None

**II-394 - Individualized Basic Skills Laboratory Units: 0.5 - 6**

This non-transferable course provides a framework for any of the disciplines listed in the catalog to offer remedial-level individualized instructional modules which are designed to develop or support the student's experiences beyond that which is available through the regular curriculum. Repeatable for credit within the same discipline to a maximum of nine units; across the disciplines, repeatable to twelve units.

Lecture Hours: 0.5      Lab Hours: None      Repeatable: 11      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

Advisory Level:      Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**Interdisciplinary Studies****IDIS-060 - Critical Thinking Units: 3**

This course will enable students to develop and refine their thinking, writing and research skills, and apply these skills in a variety of disciplines. Students will learn basic problem solving and reasoning strategies. Specific skills learned will include distinguishing fact from opinion, reasoned judgement from personal preference, and belief from knowledge to form conclusions based on sound inferences and an understanding of the common fallacies of language and thought.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: ENGL 001A with C or better

Advisory Level:      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A3      District GE: A3      IGETC: None

**Journalism****JOURN-010 - Mass Media and Communications Units: 3**

Students will study mass media and its relationship to and impact on society. Students will cover topics including basic theories in mass communication, media history and analysis of media production. Students will also explore legal, ethical and social issues related to the media.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: None

**JOURN-014 - Newswriting and Reporting Units: 3**

Students explore the fundamentals of gathering, organizing and writing selected types of news stories for print, broadcast, web and social media. The study of news sources, news values, interviewing techniques, development of leads and beats, ethical and First Amendment considerations in reporting are also covered. Students are introduced to interviewing techniques and to the content of various media platforms.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**JOURN-020 - Photojournalism Units: 3**

This course is an intermediate journalism course that stresses the use of photography as a medium in covering news. Students will learn photographic techniques including digital technology and their applications to journalism and produce photos and photo stories for campus media.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Corequisite: PHOTO 022, or basic understanding of the photographic process.

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**Kinesiology****KINS-008B - Pickleball Intermediate****Units: 1**

This course is an intermediate level class in Pickleball. Ground strokes and serves will be refined. Overhead smashes and poaching shots will be introduced. Tactics for the experienced player will be developed around personal strengths.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Cleared by a physician for physical activity

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-008C - Pickleball Advanced****Units: 1**

This course will provide instruction in Pickleball at the advanced level including tactics in poaching, varying the service, anticipating shots and adjusting tactics in singles and doubles play. Students will play competitive matches.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Cleared by a physician for physical activity

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-009B - Badminton Intermediate****Units: 1**

Students will learn necessary skills for performing in badminton at the intermediate level including developing effective short, drive and long serves. Shots developed include backcourt clears, drops, smashes, and blocks. Students will refine their ability to apply tactics in doubles, mixed and singles play. Competitive games will be played regularly.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: KINS 009A or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-009C - Badminton Advanced****Units: 1**

Students will learn necessary skills for performing in badminton at the advanced level including footwork and court positioning, reading the opponents' strengths and weaknesses and adjusting tactics, developing greater power with control in all shots. Students will learn techniques for improved quickness and shot anticipation. Competitive matches are played regularly.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Completion of KINS 009B or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-009D - Badminton Tournament Play****Units: 1**

Students will learn necessary skills and strategies for performing in badminton tournaments. Tournament preparation for playing extended matches, maintaining readiness between games, team and tournament scoring, effective team communication, rest and nutrition.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Completion of KINS 009C or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-012A - Beginning Basketball****Units: 1**

This course is designed to introduce the basic skills, techniques and rules of basketball. This is an excellent class for the student who took basketball in junior high/high school, but has not played the game for several years.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-012D - Basketball Tournament Play****Units: 1**

Students will learn necessary skills and strategies for performing in basketball tournaments or club play. Tournament preparation for playing extended matches, maintaining readiness between games, team and tournament scoring, effective team communication, and strategies will be covered.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Skills demonstration on the first day of class.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-025 - First Aid, CPR & AED****Units: 1**

This course will teach students how to recognize and respond to an emergency. The student will be prepared to make appropriate decisions regarding first aid care and how to provide care for injuries or sudden illness until professional medical help arrives. Upon completion of this course, students will be eligible to take the exam for certification in First Aid, CPR, and AED.

Lecture Hours: 0.5      Lab Hours: 1.5      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**KINS-029 - Power Punch****Units: 1**

This course is a dynamic, exciting, and effective fitness class that involves a wide array of disciplines supported by energizing music, and incorporates a number of upper body punches, and lower body kicks. The emphasis is on technique, power, and focus utilizing controlled contact and circuit training.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-033 - Introduction to Kinesiology and Physical Education****Units: 3**

This course is an introduction to the interdisciplinary approach to the study of Kinesiology. An overview of the importance of the sub-disciplines in Kinesiology will be discussed. Students will explore career opportunities in the areas of education, coaching, wellness, fitness, Allied Health, recreation, and fitness professions. [KINS-033 is the same as PED-033]

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-040A - Softball, Beginning****Units: 1**

This is a physical activity class which provides a review of the basic skills of hitting, running, catching and throwing. Team play and game strategies for slow-pitch versions of softball are included.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-040B - Softball Intermediate****Units: 1**

Students will learn intermediate softball skills and tactics. Defensive skills include fielding ground balls forehand and backhand, double plays, outfielding skills, throwing on the run and team communication skills. In addition, students will learn to use spin, placement and defensive pitching techniques. Students will develop bat control and work to increase bat speed. Offensive base running techniques to force defensive errors will be introduced.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Completion of KINS 040A or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-040C - Softball Advanced****Units: 1**

Students will learn advanced softball skills and tactics. Offensive skills include hit and run techniques, switch hitting, hitting to opposite field. Defensive skills will include position specific instruction for all infield and outfield positions. Advanced double play tactics including reading the pitched ball to anticipate direction of hit and alignment shifts will be taught. Effective base coaching techniques and commands will be covered.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Completion of KINS 040B or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-040D - Softball Tournament Play****Units: 1**

Students will learn necessary skills for tournament softball participation including readiness before, between and after multiple games in a single day or up to three days. Readiness skills for batting and fielding will be introduced and practiced in class. Effective team communication techniques and tournament specific supplies and equipment will be addressed. Hydration, nutrition and injury care will also be covered.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-047A - Tennis, Beginning****Units: 1**

This course is designed for individuals having very little or no tennis playing experience. The course includes an introduction to basic ground strokes, serves and volleys, playing rules and beginning level tactics. Students will participate in modified games appropriate to development as well as formal singles and doubles matches.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-047B - Tennis, Intermediate****Units: 1**

This course is designed for individuals having some tennis playing experience. Course content includes continued development of forehand and backhand ground strokes, service, net play, smashes and lobs. Offensive and defensive tactics will be introduced for singles and doubles play. Students will participate in frequent matches.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Must have some tennis playing experience

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-047C - Tennis, Advanced****Units: 1**

This course is designed for individuals having competitive tennis playing experience. Course content includes physical conditioning for competitive play, continued development of power and control in all ground strokes and serves, advanced level offensive and defensive tactics, mental preparation for greater success, and performing under pressure. Students will engage in frequent tournaments in competitive singles and doubles play.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Should have competitive tennis playing experience

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-051A - Table Tennis Beginning****Units: 1**

Students will learn rules, etiquette and basic skills regarding Table Tennis. Serve, forehand, backhand and loops will be introduced. Body position and readiness necessary to develop faster play will be practiced. Students will develop game playing skills during class practice with singles and doubles.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-051B - Table Tennis Intermediate****Units: 1**

Further development of table tennis skills including pendulum forehand and sidespin backhand serves, forehand and backhand loops with technique to maximize spin generation. Improved set-up, blade angle, body position and follow through to generate more effective blocks, chops, and smashes. Tactics against spinners and power hitters will be introduced. Students participate in competitive matches in singles and doubles play.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: KINS 051A

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-051C - Table Tennis Advanced****Units: 1**

Table tennis skills, tactics and footwork for the advanced player. Mental training for shot anticipation, recovery positioning and return hitting zone is introduced. Service variety and tactics against attackers and defenders, loop shots against the push and block, counter-loops, counter-spin shots, and flick shots will be taught. Students perform regularly in competitive singles and doubles matches.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: KINS 051B

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-052A - Beginning Volleyball****Units: 1**

This course is designed to introduce the basic fundamentals of volleyball. Students will learn the rules, strategies and proper etiquette as well as an appreciation for a lifetime activity.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-052B - Intermediate Volleyball****Units: 1**

This course is designed to introduce the intermediate level skills, techniques, and rules of volleyball. Emphasis will be placed on refining fundamental skills and strategies, as well as an appreciation that volleyball is a lifetime activity.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Complete the beginning volleyball course or have the necessary skills.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-052C - Advanced Volleyball****Units: 1**

This course is designed for students that are able to play volleyball at an advanced level, with the ability to perform advanced techniques, demonstrate ideal body positioning during advanced play, and to understand and apply the written and unwritten rules of play.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: KINS 052B with a grade of C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-052D - Volleyball Tournament Play****Units: 1**

Students will learn necessary skills and strategies for performing in volleyball tournaments or club play. Tournament preparation for playing extended matches, maintaining readiness between games, team and tournament scoring, effective team communication, and strategies will be covered.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Completion of KINS 052C or equivalent (student background playing experience)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-053A - Walk/Jog Beginning****Units: 1**

This entry level course will introduce techniques for improving cardiovascular fitness, strength, flexibility and weight management through the activity of walking and jogging. The class is designed for individuals having little or no previous experience in walking or jogging programs. Principles for improved health practices and healthy weight management will be covered. Throughout the class students will progress to more challenging routes as physical fitness improves.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Cleared by a physician for physical activity

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-053B - Jogging for Fitness****Units: 1**

This course provides information on preparation, training principles and suggested programs to follow for jogging for fitness. It also includes techniques to improve and progress to a higher level of aerobic capacity, as well as focus on the benefits of strength and flexibility programs related to jogging.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-056A - Weight Training Beginning****Units: 1**

This is a physical activity course designed to teach students how to use progressive weight resistance exercises to develop muscular strength and endurance while using both free weights and weight machines.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-056C - Weight Training Advanced****Units: 1**

This is a physical activity course designed for students having a solid understanding of basic training techniques and strength programs. Students will learn techniques for bodybuilding and improving strength and speed in athletic competition.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-070A - Fitness Walking for Beginners****Units: 1**

This course is designed to teach fitness walking. The student will learn fitness walking techniques, fitness walking exercise principles, and different fitness walking training programs. Students will participate in fitness walking throughout the semester and learn fitness walking measurement and evaluation techniques. This class is intended for walkers of any age, fitness level, and skill level.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-080 - Backpacking and Hiking****Units: 1**

The course covers safe and environmentally responsible skills, methods and principles for participating in hiking and backpacking.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-080L - Backpacking and Hiking Lab****Units: 1**

Complete weekly hikes at local county parks followed by an extended overnight field experience in one of the National Parks or wilderness areas.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: KINS 080 or concurrent enrollment

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**KINS-081L - Canyoneering Lab****Units: 1**

Develop Canyoneering skills in bouldering; basic rope use including knots, tie-in, anchor and belay techniques; basic climbing skills stemming, smearing, layback, wedge; and apply these skills exploring canyons on an extended overnight trip.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: KINS 080 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-082L - Hiking Death Valley****Units: 1**

Develop necessary skills and understanding to hike safely and responsibly in desert condition. Local training will occur on and off campus prior to an extended overnight field experience to Death Valley National Park.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: KINS 080 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-087A - Hiking and Backpacking, Beginning****Units: 1**

This course will introduce students to the preparation, knowledge and skills necessary for safe, enjoyable and adventurous hiking and backpacking. Students will build stamina and fitness hiking local parks and complete an overnight field experience hiking and camping in a wilderness area.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Cleared by a physician for physical activity

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-087B - Hiking and Backpacking, Intermediate****Units: 1**

This course will develop greater understanding and capacity to hike and/or backpack distances up to 10 miles with elevation changes up to 2,000 feet. Students will learn about trail ratings, planning for extended exposure, managing hydration and energy needs and risk management. The course includes an overnight field experience camping and hiking in a wilderness area.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Cleared by a physician for physical activity

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**KINS-088A - Rock Climbing, Beginning****Units: 1**

The student will learn about introductory rock climbing terminology, gear, tie-in, basic knots, and climbing techniques. Skills will be practiced on natural rock and artificial surfaces. The course includes an over-night camping field experience where skills are practiced on natural rock. Equipment will be provided.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**KINS-088B - Rock Climbing, Intermediate****Units: 1**

The student will learn top-rope climbing skills to master routes designated up to 5.6 on the Yosemite decimal system. Basic belay and repel skills will be introduced. Skills will be practiced on natural and artificial surfaces. The course includes an over-night camping field experience where skills are practiced on natural rock. Equipment will be provided.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**KINS-088C - Rock Climbing 5.7****Units: 1**

The student will learn climbing skills to master routes designated up to 5.7 on the Yosemite Decimal System. Skills will be practiced on natural and artificial surfaces. The course includes an over-night camping field experience where skills are practiced on natural rock. Equipment will be provided.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: It is recommended the student have previous climbing experience.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**KINS-089A - Paddle Sports, Beginning****Units: 1**

The student will learn skills to kayak, canoe and/or stand-up paddle board including terminology, etiquette and local regulations, basic paddle strokes, dock launching and landing skills. Some class meetings will be held off-campus. Over-night field experience camping may be required. Equipment will be provided.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**KINS-089B - Paddle Sports, Intermediate****Units: 1**

The student will learn canoe, kayak or paddle board skills launching and landing from/to irregular natural surfaces, two person rescue skills and managing waves to 2 inches in height. Some classes are taught off-campus. Over-night field experience will be required in a wilderness setting. All equipment will be provided.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**Legal Assistant****LA-010 - Introduction to Law, Legal Research, the Constitution, and Ethics Units: 3**

This course provides an introduction to law, legal research, constitutional law, and legal ethics while helping students build the foundational skills necessary to succeed in legal specialty courses and in professional careers. The course includes an overview of constitutional law and court systems, a survey of legal ethics, an introduction to legal research methods, and an examination of current careers for legal professionals. Course objectives include the development of a working knowledge of the legal system, acquisition of basic legal research skills, and an understanding of current ethical guidelines in the law.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-011 - Overview of Contracts, Property, and Tort Law Units: 3**

This course provides an essential overview of the three main areas of civil law: contracts, property, and tort law. Students will learn the legal requirements of valid contracts and the functions of commonly used provisions as they gain experience drafting and customizing various contracts. Students will also receive an introduction to property law, including the basic concepts involved in the ownership and use of personal property and real property. The class will also cover the fundamentals of tort law, including intentional torts, negligence, strict liability torts, and the policies and procedures of a personal injury law office.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-014 - Civil Litigation Units: 3**

This course provides students with an understanding of the fundamental principles and preparation of civil cases for trial. Students will learn how to access and utilize appropriate Judicial Council forms, draft pleadings and motions, conduct pre-trial discovery, prepare trial notebooks, and handle other responsibilities that are typical for paralegals in a litigation-oriented law office.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-016 - California Courts and Litigation Practice Units: 3**

This course serves as an introduction to courts of law in this state, including the California Supreme Court, Courts of Appeal, Superior Courts, and California-based federal District Courts. The course covers the structure, institutions, jurisdiction, and rules of the court system. In addition, students will gain practical knowledge of the various stages of litigation practice that involve the courts, including the filing of cases, preparation of court documents, proper use of discovery, and readiness for trial.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-033 - Tort and Personal Injury Law Units: 3**

This course prepares the student to assist attorneys and corporations in tort and personal injury law. Students gain substantive knowledge of tort law and will be trained in the use of specific forms and procedures utilized in personal injury work. Course content includes intentional torts, negligence, professional malpractice, causation, proximate cause, strict liabilities, employer's liability, nuisance, misrepresentation, product liability, and complex litigation.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-036 - Real Estate and Property Law Units: 3**

This course covers real property law, purchase and sales agreements, mortgages, leases, easements, deeds, closings, recordings of documents, and title searches. Emphasis will be placed upon interpreting the law and completing documents that are typically used for property transactions in a law office environment.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-038 - Family Law Units: 3**

This course covers the substantive law in the area of family law and domestic relations. Subjects covered will include dissolution of marriage, adoptions, guardianship, child/spousal/family support, child custody, and paternity. The class will train the student in the skills necessary to work as a paralegal in the area of family law. Content will include the use of Judicial Council forms, the preparation of pleadings, drafting of declaration, preparation of Income and Expense Declaration Form, the drafting of property settlement agreements, and the use of interviewing checklists.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**LA-040 - Criminal Law Units: 3**

This course provides the student with a comprehensive understanding of the provisions of criminal law and procedure. Content includes the criminal court system and how it functions, the criminal justice system from arrest to trial and sentencing, elements of and defenses to all major crimes, and an overview of criminal procedure from the arrest through the appeal.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**LA-042 - Corporate and Partnership Law Units: 3**

This course provides students with a general understanding of the various legal structures of businesses and the laws governing business transactions. Students learn the basic laws of corporations, partnerships, sole proprietorships, and modern limited liability entities. The course will emphasize finding and utilizing proper business forms and drafting appropriate documents related to the creation and operation of the various business organizations.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-044 - Intellectual Property Law Units: 3**

This course introduces students to the expanding field of patents, copyrights, trademarks, and trade secrets. Course content will include patents, trade protection, semiconductor chip protection, Section 43(a) false advertising, unfair competition, publicity rights, and idea submission. For each major specialty area, coverage will also include: The nature of the protected right, what is protected, the requirements for protection, who may be protected, the duration of protection ownership, transfer of ownership, infringement, and remedies.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-046 - Immigration Law Units: 3**

Students will study basic immigration law for paralegals. This is a hands-on approach to identification of people eligible to immigrate, types of visas, citizenship eligibility and application, and special conditions. Course topics include United States Citizenship and Immigration Services (USCIS) structure, procedures, and filings; factual, country, and legal research; and immigration case management and technology.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-050 - Constitutional Law Units: 3**

This course is designed to present a basic understanding of the U. S. Constitution, from its development to present-day applications. Topics covered include: the formation of the 3 branches of government, state's rights and responsibilities, and the rights afforded individual citizens such as freedom of speech, religion, assembly, and the right to privacy. The course also covers the rights of persons accused of a crime, which are guaranteed by the Constitution and subsequent statutes.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-071 - Legal Research Units: 3**

This course provides the student with a working knowledge of the essential techniques used to research legal issues. Students will learn to find, select, and begin utilizing appropriate sources of law in the library and in the online LEXIS and WESTLAW databases. The course covers primary sources of law such as federal and state constitutions, statutes, cases, and regulations, as well as secondary sources that include legal dictionaries, encyclopedias, digests, summaries, and articles. Students will learn how to update statute and case law using the Shepard's and KeyCite citators. The course will include basic legal analysis and writing assignments which draw upon research results.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: LA 010, with grade of C or better.

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-072 - Advanced Legal Analysis & Writing Units: 3**

This course provides students with advanced skills training in legal analysis, legal writing, and the use of electronic legal research using databases such as WESTLAW and LEXIS. Students will be presented with complex legal problems and will learn how to analyze them using the IRAC method (Issue, Rule, Analysis, Conclusion). Students will learn to present their legal analyses in professional quality written documents, including trial court pleadings, research memoranda, motions, client opinion letters and demand letters.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: LA 010, with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**LA-138 - Work Experience Units: 1 - 8**

Occupational Work Experience is designed for students who work or volunteer in a field related to their career major. Students are required to provide evidence that they are enrolled in a career program (e.g., education plan or coursework in a career/occupational subject area). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 2.07 Repeatable: 15 Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**Library Studies****LIB-015 - Electronic Research and the Internet Units: 3**

This is an online course providing students with skills and competencies to use electronic information sources (the web, online catalogs, and databases) for course-related or personal research. Students will learn to define an information search, select the sources appropriate to their needs, use criteria for evaluating information sources, and document information sources using accepted formats. Student participation will be via email, discussions, and online chat.

Lecture Hours: 2 Lab Hours: 3 Repeatable: No Grading: L

Recommended: Basic computer and word processing skills, including e-mail and chat

*Advisory Level:* Read: 3 Write: 3 Math: None  
 Transfer Status: CSU/UC Degree Applicable: AA/AS  
 CSU GE: None District GE: None IGETC: None

**Mathematics****MATH-013 - Intermediate Algebra****Units: 5**

This course continues the algebra sequence and is a prerequisite to college level math courses. Students will review the first course in algebra and explore further the real number system, properties of algebraic systems, absolute value in equations and inequalities, complex numbers, properties of rational exponents and logarithms, roots and radicals, functions, inverse functions, and introduction to sequences and series. Content may include determinants, Cramer's rule, matrices, simultaneous solutions of sets of equations, or conic sections.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: MATH 111 with P grade, or placement based on assessment

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**MATH-014 - Geometry****Units: 3**

The course involves the study of plane geometric figures and relationships. Students will study logical proofs, constructions, and numerical calculations. Additional topics in solid geometry and analytic geometry may be covered. This course is highly recommended for anyone who has not taken or wishes to review high school geometry.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

Credit by Exam: Yes

Prerequisite: MATH 111 with P grade, or placement based on assessment

Recommended: Strongly recommend completion of MATH 013 or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**MATH-021 - Precalculus Algebra****Units: 4**

This course is designed to prepare students for the level of algebra required in calculus. Topics will include basic algebraic concepts, complex numbers, equations and inequalities, graphs of functions, systems of equations and inequalities, linear and quadratic functions, polynomial functions of higher degree, rational, exponential and logarithmic functions, matrices and determinants and analytic geometry. Students will not receive credit for both MATH 021 and MATH 025.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: 2A

**MATH-022 - Trigonometry****Units: 3**

This course in numerical and analytical trigonometry is designed to prepare students for the level of trigonometry and advanced algebraic concepts necessary for calculus. Topics include degree and radian measurements of angles, right triangle trigonometry, unit circle trigonometry, graphs of trigonometric functions, algebraic manipulation and proof of trigonometric identities, inverse trigonometric functions, solving trigonometric equations, the Laws of Sines and Cosines, vectors, the polar coordinate system, and roots and powers of complex numbers (De Moivre's Theorem). Students will not receive credit for both MATH 022 and MATH 025.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 and MATH 014, both with C or better, or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: None

**MATH-025 - Precalculus Algebra and Trigonometry****Units: 6**

This course is an intensive combined course in college algebra and trigonometry designed primarily as preparation for calculus. Students will study basic algebraic concepts, complex numbers, equations and inequalities, graphs of functions, system of equations and inequalities, linear and quadratic functions, polynomial functions of higher degree, rational, exponential, logarithmic, and trigonometric functions, inverse functions, basic identities, trigonometric equations, solving right triangles, solving triangles using the Law of Cosines and the Law of Sines, vectors, polar coordinates, and analytic geometry. Students may take both MATH 021 and MATH 022 or take only MATH 025.

Lecture Hours: 6      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 and MATH 014, all with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: 2A

**MATH-051 - Mathematics for General Education****Units: 3**

This course is intended for non-science majors. It fulfills the general education requirements in Mathematics in the CSU system. Current topics in math will be discussed including number theory, consumer math, voting theory, graph theory, basic probability and statistics, and concepts in geometry such as symmetry, patterns and the golden rectangle.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: 2A

**MATH-052 - Math for Elementary Education****Units: 3**

This course covers arithmetic theory and operations necessary for the teaching of mathematical concepts to elementary school children. The course includes basic set theory and logic, number theory, numeration systems and their history, modular arithmetic, mathematical patterns and sequences, and the structure and properties of integers, real and rational numbers. Designed for prospective multiple subject credential candidates.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 and MATH 014, both with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: None

**MATH-061 - Finite Mathematics****Units: 3**

Finite Mathematics is the application of skills acquired in algebra to problems in business, management, economics, and the social sciences. Course content includes systems of linear equations and inequalities, matrices, linear programming, set theory, counting techniques, probability theory, and the mathematics of finance.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B4      District GE: B4      IGETC: 2A

**MATH-062 - Calculus for Business and Social Science Units: 3**

This course presents single variable calculus and an introduction to multivariable calculus and their applications for business and social science students. The content includes functions and graphs, limits, continuity, differential and integral calculus of polynomials, rational functions, power functions, exponential functions, logarithmic and natural logarithmic functions, partial differentiation and applications of these topics in business and social science.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 021 or MATH 025, with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-063 - Elementary Statistics Units: 3**

This course is an introduction to the study of statistics. Students will learn methods of collecting data, displaying data, descriptive statistics with emphasis on understanding variation, empirical probability, probability distributions, sampling distributions, confidence intervals and sample size, hypothesis testing, testing the difference between two independent population parameters, matched pairs analysis, one-way analysis of variance, chi-square tests, correlation and simple linear regression.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-071 - Calculus I with Analytic Geometry Units: 5**

This is the first course of the calculus sequence. It is intended for majors in mathematics, computer science, engineering and the physical sciences. This course covers differentiation and integration of functions of one variable, with applications. The course includes a treatment of limits and continuity; differentiation: definition, rules, application to graphing, rates, linear approximation, and extremum problems; indefinite integration; Riemann sums, definite integral, the Fundamental Theorem of Calculus; and application of integration to geometry and science.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: L

Prerequisite: (MATH 021 and MATH 022) or MATH 025, all with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-072 - Calculus II with Analytic Geometry Units: 5**

This is the second course in calculus and analytic geometry for students majoring in mathematics, physical sciences, computer science, or engineering. Topics included are techniques of integration, applications of integration to areas, volumes, average values of functions, arc lengths, surfaces of revolution, problems in physics and engineering, use of parametric equations and polar equations to plot curves and compute derivatives, areas and arc length, a thorough study of infinite sequences, infinite series, and power series, and an introduction to differential equations.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 071 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-073 - Multivariable Calculus Units: 5**

This is the third course in calculus for students majoring in mathematics, physical science, computer science, or engineering. In this course, the concepts of differential and integral calculus are extended to multivariable functions. The course content includes vectors in two and three dimensional space, vector-valued functions, differentials, gradients, multiple integrals, vector fields, line integrals, surface integrals, and vector calculus.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 072 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-078 - Differential Equations Units: 4**

Students will study ordinary differential equations and their applications, including methods for solving first order equations, linear equations of arbitrary orders, and systems of linear differential equations. Students are introduced to Laplace transforms, series solutions, and some theoretical aspects of differential equations such as existence and uniqueness of solutions, the phase plane, and stability of equilibrium solutions for autonomous equations.

Lecture Hours: 4 Lab Hours: None Repeatable: No Grading: L

Credit by Exam: Yes

Prerequisite: MATH 072 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-079 - Linear Algebra Units: 3**

This course is designed for students majoring in math, statistics, physics, computer science or engineering. It develops the techniques and theory needed to solve systems of linear equations using matrices and determinants. It also investigates the properties of vector spaces. These topics will be mainly presented including orthogonality and inner product spaces, eigenvalues and eigenvectors, linear transformations and their applications.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Prerequisite: MATH 072 with C or better

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B4 District GE: B4 IGETC: 2A

**MATH-111 - Elementary Algebra Units: 5**

Students will study topics including operations on real numbers and algebraic expressions, solving linear equations and inequalities, algebraic methods for solving application problems, graphing linear equations and inequalities, solving systems of linear equations, laws of exponents and operations on polynomials, factoring polynomials and solving quadratic equations by factoring, and operations on rational expressions and solving rational equations.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: K

Prerequisite: MATH 311 with P grade, or placement based on assessment

*Advisory Level:* Read: 3 Write: 3 Math: None  
Transfer Status: None Degree Applicable: NAA  
CSU GE: None District GE: None IGETC: None

**MATH-115 - Algebra for Statistics****Units: 6**

This course is designed for students who do not plan to major in math, science, computer science, or business. This is an accelerated course that prepares students for transfer-level Statistics. Topics include ratios, rates, and proportional reasoning, arithmetic reasoning using fractions, decimals and percents, evaluating expressions, analyzing algebraic forms to understand statistical measures, functions, use of linear and exponential functions to model bivariate data, use of logarithms, logarithmic scales and semi-log plots, graphical and numerical descriptive statistics for quantitative and categorical data.

Lecture Hours: 6      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: 3 units of MATH 310 or MATH 311 with P grade, or placement based on math assessment.

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**MATH-300 - Basic Math Skills****Units: 1**

This course is offered to students who need basic math experience. It includes a review of operations (addition, subtraction, multiplication, and division) on whole numbers, decimals and fractions.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*    Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**MATH-310 - Basic Mathematics****Units: 1 - 3**

This course is designed to give students a basic background in mathematics. Topics include operations and application problems with whole numbers, fractions, decimals and percents, prime numbers, order of operations, units of measurement, perimeters, areas, signed numbers, variables, and simple equations.

Lecture Hours: 1 - 3      Lab Hours: None      Repeatable: No      Grading: K

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*    Read: None      Write: None      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**MATH-311 - Pre-Algebra****Units: 3**

This course is designed for those students who have a foundation in arithmetic but need to further develop skills before taking Elementary Algebra, and is intended to serve as a bridge between arithmetic operations and elementary algebra. Topics include integers, fractions, decimals, percents, exponents, scientific notation, order of operations, variables, algebraic expressions, equations, basic geometric shapes, and simple applications.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: K

Prerequisite: 3 units of MATH 310 with P grade or placement based on math assessment

*Advisory Level:*    Read: 2      Write: 2      Math: None  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**Music****MUSIC-008A - Music History and Literature I****Units: 3**

Students will study the history of Western music from antiquity through the Baroque period including the contributions of other cultures with selected readings and recordings. Attendance at a live performance is required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-008B - Music History and Literature II****Units: 3**

Students will study the history of Western music from the Classical Period through the present including the contributions of other cultures with selected readings and recordings. Attendance at a live performance is required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-010A - Music Theory I****Units: 3**

This course, through guided composition and analysis, incorporates the following concepts: rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; diatonic chords, basic cadential formulas and phrase structure; dominant seventh; figured bass symbols; and non-harmonic tones. Development of skills in handwritten notation is expected.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Prior completion of MUSIC 099 and concurrent enrollment in MUSIC 011A and an appropriate keyboard course

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-010B - Music Theory II****Units: 3**

This course incorporates the concepts from Music Theory I. In addition, through guided composition and analysis, the course will include an introduction to two-part counterpoint, voice leading involving four-part chorale writing, diatonic harmony, and an introduction to secondary/applied chords and modulations.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MUSIC 010A with C or better

Recommended: MUSIC 011B and appropriate level keyboard course

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-010C - Music Theory III****Units: 3**

This course incorporates the concepts learned in Music Theory II and introduces chromatic harmony, altered chords and formal analysis.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MUSIC 010B with C or better

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-010D - Music Theory IV****Units: 3**

This course incorporates the concepts from Music Theory III. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: MUSIC 010C with C or better

Recommended: Musicianship IV and appropriate level keyboard course

*Advisory Level:*      Read: 4      Write: 4      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: C1      IGETC: None

**MUSIC-011A - Musicianship I****Units: 1**

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory I through ear training, sight-singing, analysis, and dictation.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: MUSIC 099 and MUSIC 010A

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-011B - Musicianship II****Units: 1**

Students learn to sight-sing in treble, bass and alto clef. This course focuses on the materials learned in MUSIC 010B and includes sight-singing, analysis and dictation.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MUSIC 011A with C or better

Recommended: MUSIC 050B

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-011C - Musicianship III****Units: 1**

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory III through ear training, sight singing, analysis, and dictation.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MUSIC 011B with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-011D - Musicianship IV****Units: 1**

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory IV through ear training, sight singing, analysis, and dictation.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MUSIC 011C with C or better

Recommended: Concurrent MUSIC 020

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-020 - Class Piano****Units: 1**

This course is designed for intermediate pianists to improve technique and interpretive abilities. Study and testing materials are drawn from a graduated series of exercises, etudes, and representative piano works. The student will learn how to assess and provide the stylistic nuances and phrasing concepts required for the performance of repertoire work from the Renaissance through the 20th century. The student will learn approaches to improvisation and other creative activities.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MUSIC 050B, with grade C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-020B - Class Piano B****Units: 1**

This course continues the development of piano skills through all major and minor scales, arpeggios, harmony, and intermediate-advanced repertoire.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**MUSIC-023 - Class Voice****Units: 1**

This course is designed for experienced singers to improve their technique and performance and interpretive skills. Study and testing material are drawn from a graduated series of vocal exercises, etudes and representative vocal solos. The student will learn how to assess and provide the stylistic nuances and phrasing concepts required for the performance of repertoire from the Renaissance to the modern day. The course will also include individualized instruction in folk songs and classical music indigenous to various cultures.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: MUSIC 053B with a C or better

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-047 - All-College Choir****Units: 1.5**

This is a mixed choral ensemble for all college students and faculty. Standard choral works from classical and folk repertoire are studied with a public performance given at the end of the semester. Emphasis is given to accompanied works. Brief audition required.

Lecture Hours: None      Lab Hours: 4.5      Repeatable: No      Grading: O

Recommended: MUSIC 099

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-050A - Beginning Piano I****Units: 1**

This is an introductory course in piano. The course is designed for students wanting to learn music using the piano. The student will study basic theory concepts such as the 5-finger pattern, intervals, chords, simple chord progressions, and scales. This course reinforces concepts taught in the theory courses. Students will harmonize simple melodies, transpose and improvise simple pieces and patterns.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-050B - Beginning Piano II****Units: 1**

This is the second semester introductory course in piano. Students will expand their knowledge of basic theory concepts such as scales, intervals, chords, and simple chord progressions. This course reinforces concepts taught in MUSIC 050A. Students will harmonize simple melodies, transpose and improvise simple pieces and patterns.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MUSIC 050A, with grade C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-052A - Beginning Guitar I****Units: 1**

This course introduces students to playing the guitar, including music notation and sight-reading, correct positioning and technique, chords, strums, arpeggios. Students will play and learn basic ensemble and solo pieces and songs.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: MUSIC 099; Student must supply their own guitar

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-052B - Beginning Guitar II****Units: 1**

Students will further develop their ability to play guitar, including reinforcement and refinement of sight reading, utilize correct technique, and play chords, arpeggios, and strums. Students will play with and for class members and perform ensembles, solo pieces and songs.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: MUSIC 052A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-053A - Beginning Voice****Units: 1**

This course provides a basic introduction to voice discipline with an emphasis on the fundamental aspects of singing through breath support and tone placement. Technical exercises and simple vocal pieces of various styles will be learned and performed in a class atmosphere where listening and performing are used as tools of instruction.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: MUSIC 099

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-053B - Beginning Voice****Units: 1**

This course continues building upon the skills acquired in Music 053A and further develops the fundamentals of vocal technique through exercises that require greater depth and ability. Technical exercises and vocal pieces of various styles will be learned and performed in a class atmosphere where listening and performing are used as tools of instruction.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: MUSIC 053A with C or better

Recommended: MUSIC 099

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-091 - Music Appreciation: Western Civilization Units: 3**

This course provides the opportunity for students with no previous musical experience, to develop an appreciation of the music of western cultures through the development of aural listening skills. The course focuses on the relationships between composers and the times in which they lived. Included in each unit of study is a discussion of the influence of government, philosophy, art, religion, and musical composition. Attendance at a live performance is required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-092 - Music Appreciation: American Musical Theater Units: 3**

This course is designed for students interested in developing an appreciation of the American Musical Theater as an art form, and in gaining an understanding of its composition, evolution, philosophical, and multi-cultural basis.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-093 - Introduction to Film Music Units: 3**

This course serves as an introduction to the study of Hollywood film music from the 1920's to the present day. The class will explore the relationship between film and sound through original and adopted film scores. This course will explore both historic and technical aspects of film music.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-095 - Music Appreciation: Jazz Units: 3**

Students who have little or no previous experience in musical performance or listening to the traditions of jazz music will study the musical elements of jazz and appraise the development of the jazz art form as a product of culture. Students will also study how to aurally distinguish the elements of jazz music and trace the evolution of styles and structures of jazz from its inception to the present time.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: 3A

**MUSIC-096 - Introduction to Electronic Music Units: 3**

This course is intended to introduce students to the basics of electronic music production, which includes the fundamental techniques of Musical Instrument Digital Interface (MIDI) and Digital Audio in the project studio environment. The student will learn the use of keyboard controllers, software synthesizers and instruments, MIDI sequencing and digital audio recording in the making of music. Short technical quizzes and music assignments will be given on material covered in class. Some prior music experience is recommended, but not required.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-099 - Introductory Music Units: 3**

This course is designed for the student who wishes to learn the "language" of music; how to read, notate, interpret, perform, and create with those symbols which represent the four properties of sound: pitch, duration, amplitude, and timbre. It includes the study of the fundamentals of Western notated music and how these elements combine to create musical compositions: pitch identification, rhythm and meter, scales, key signatures, intervals, chord construction, harmonic progression and texture. Students will discuss style analysis, i.e., what elements of music are organized in various cultures and time periods.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C1      District GE: C1      IGETC: None

**MUSIC-180 - Ensemble Units: 1**

This course is for the study, rehearsal, and public performance of literature appropriate to the ensemble, with an emphasis on the development of skills needed to perform within an ensemble. Different literature will be studied each semester. Choice of ensemble is based on each student's identified major instrument or voice. The course is repeatable for credit the maximum times allowable by regulation.

Lecture Hours: None      Lab Hours: 3      Repeatable: 3      Grading: L

Prerequisite: Students must pass an audition.

*Advisory Level:*      Read: 4      Write: 4      Math: 3  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**MUSIC-190 - Applied Music: Strings, Winds, Brass, Percussion, Piano, Voice Units: 0.5**

This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance.

Lecture Hours: None      Lab Hours: 1.5      Repeatable: 3      Grading: L

Prerequisite: Audition required. Must also enroll in theory class.

Recommended: Concurrent participation in an appropriate ensemble and enrollment in appropriate-level major preparation courses (Theory, Musicianship, Keyboard, etc.)

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

*Nursing***NURS-001 - Fundamentals of Nursing Units: 9.5**

This course addresses the health needs of individuals of varied psychosocial and cultural backgrounds. Nursing skills are developed to adapt nutrition, hygiene, comfort, safety and pharmacology for each client. This course is designed to apply the nursing process to the health needs of the adult client utilizing basic nursing skills and caring behaviors to meet physical, social and emotional needs. The Client Needs approach is used as the framework for providing safe and effective nursing care. The course includes clinical experiences in health care facilities.

Lecture Hours: 4.5      Lab Hours: 15      Repeatable: No      Grading: L

Prerequisite: BIOL 071, BIOL 072, BIOL 074, ENGL 001A, all with minimum grade of C, and admission into the EVC Nursing Program.

Advisory Level:      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA  
 CSU GE: None      District GE: None      IGETC: None

**NURS-002A - Basic Medical-Surgical Nursing Units: 5**

This course focuses on health promotion and health maintenance for the adult client with chronic illness. Course content includes pharmacological therapies, the nurse's role in preventive and rehabilitative services, and the maintenance/restoration of physiological and psychosocial integrity through the application of the nursing process. This course includes clinical experiences in adult health care units.

Lecture Hours: 2.5      Lab Hours: 7.5      Repeatable: No      Grading: L

Prerequisite: NURS 001 with C or better

Advisory Level:      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-002B - Maternity Nursing Units: 4**

This course focuses on health promotion and health maintenance for the childbearing client. The course content includes pharmacological therapies, the nurse's role in maternity nursing, and the maintenance/restoration of physiological and psychosocial integrity through the application of the nursing process. This course includes clinical experiences in maternity units.

Lecture Hours: 2.5      Lab Hours: 4.5      Repeatable: No      Grading: L

Prerequisite: NURS 001 with C or better

Advisory Level:      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-003 - Advanced Pediatrics and Medical-Surgical Nursing Units: 8.5**

This course includes the application of medical-surgical nursing care for the pediatric, adolescent and adult client with complex disorders. Course content emphasizes pathophysiology, growth and development, nutrition and pharmacology. The nursing process is used to apply these concepts to the maintenance and restoration of physiological and psychosocial integrity of the client. The course includes clinical experiences in pediatric and adult health care settings.

Lecture Hours: 4.5      Lab Hours: 12      Repeatable: No      Grading: L

Prerequisite: NURS 002A and NURS 002B, with a C or better

Advisory Level:      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-004 - Advanced Medical-Surgical/Geriatric/Mental Health/Leadership and Management Nursing Units: 10**

This course includes mental health nursing, advanced medical surgical nursing, geriatrics, leadership and management, including the preceptorship. Mental health nursing includes the principles of mental health and the social, economic, cultural and physiological factors that predispose a person to mental illness. In advanced medical surgical nursing, critical thinking and leadership concepts are applied to the management and care of multiple clients in adult and geriatric settings. During preceptorship, in collaboration with a registered nurse, the student will provide optimal client outcomes by applying concepts learned throughout the nursing program.

Lecture Hours: 4.5      Lab Hours: 16.5      Repeatable: No      Grading: L

Prerequisite: NURS 003 with C or better

Advisory Level:      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-109 - Nurse Assistant Training/Home Health Aide Training Units: 7**

This course focuses on nursing assistant and home health aide skills/concepts performed under the direct supervision of a nurse. It is designed to provide a foundation of basic nursing care including vital signs, transfer and feeding techniques, bed making, hygiene, and environmental safety. Communication skills, cultural awareness, and sensitivity as well as client rights and safety will be stressed. Application of these skills will occur in a skilled nursing facility and assisted living facility. Successful completion of the course qualifies the student to take the CA State Certification Exam. Course requirements include high school graduation or GED, Social Security number and background clearance.

Lecture Hours: 4.5      Lab Hours: 7.5      Repeatable: No      Grading: L

Prerequisite: High School Graduation or GED required; current Basic Cardiac Life Support for Health Care Providers; Health Clearance including physical exam and TB testing; Background clearance and Social Security Number required

Advisory Level:      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**NURS-119 - Pathophysiology for Allied Health Units: 3**

This course will provide a foundation of essential concepts of disease processes for students to examine and apply in their allied health field. The three areas of focus will include fundamental concepts and processes in pathophysiology, the relationship of developmental stages to pathophysiology, and specific disorders organized by body systems.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: BIOL 071 and BIOL 072; both with C or better

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-120 - Pharmacology in Nursing****Units: 3**

This course is a study of the interaction between drugs and living systems and their connection to the nursing practice. The major pharmacological classifications will be presented and integrated with the concepts of physiological and psychological principles. Nursing responsibilities relative to the administration of specific medications will be emphasized including safety, comfort, communication, teaching, health promotion, restorative/rehabilitative measures and cultural diversity.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: BIOL 072 with C or better

*Advisory Level:*      Read: 4      Write: 4      Math: 2  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**NURS-131A - Nursing Resource Center, Lab 1****Units: 1**

This elective course is recommended to be taken during the first semester of the nursing program. The course correlates with the content of NURS 001, Fundamentals of Nursing. This course provides access to an instructor-facilitated lab in the Nursing Program Resource Center which includes the Nursing Skills lab and Nursing/Biology computer center.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Corequisite: NURS 001

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**NURS-131B - Nursing Resource Center, Lab 2****Units: 1**

This elective course is recommended to be taken during the second semester of the nursing program. The course correlates with the content of NURS 002A and NURS 002B, Basic Medical-Surgical Nursing and Maternity Nursing. This course provides access to an instructor-facilitated lab in the Nursing Program Resource Center, which includes the Nursing Skills lab and Nursing/Biology computer center.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Prerequisite: NURS 001 with C or better

Corequisite: NURS 002A or NURS 002B

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**NURS-132A - Nursing Resource Center, Lab 3****Units: 1**

This elective course is recommended to be taken during the third semester of the nursing program. The course correlates with the content of NURS 003, Advanced Pediatrics and Medical Surgical Nursing. This course provides access to an instructor-facilitated lab in the Nursing Program Resource Center which includes the Nursing Skills lab and Nursing/Biology computer center.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: K

Prerequisite: NURS 002A and NURS 002B, both with C or better

Corequisite: NURS-003

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

***Oceanography*****OCEAN-010 - Descriptive Oceanography****Units: 3**

This course provides a description of the ocean environment covering the geological, physical, chemical and biological aspects of the sea. It includes the origin and extent of the oceans, nature of the ocean basins, causes and effects of currents, waves, tides, and plant and animal life in the ocean. The course partially fulfills the general education requirement in physical science, without a laboratory.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: MATH 111 with P grade or placement based on math assessment

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1      District GE: B1      IGETC: 5A

***Philosophy*****PHIL-010 - Introduction to Philosophy: Metaphysics and Epistemology****Units: 3**

Introductory course for philosophical history and disciplines of metaphysics and epistemology from Socrates to Wittgenstein. This course will cover a long progression of ideas about being, knowledge, justice, goodness, existence and language. The history of philosophy through the ideas proposed by the most important philosophers will be presented in a thematic development so that students can learn, not only basic concepts and ideas, but causes of the development of philosophical history.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**PHIL-060 - Logic and Critical Thinking****Units: 3**

This is an introductory course in informal fallacies, inductive and deductive arguments. The course will focus on what the elements of an argument are, the distinction between basic forms of argument, comparing the strength of one argument to another and the rules of formal logic. Students will study causal relations, scientific, statistical and moral reasoning. There is a strong emphasis on the written expression and the application of critical thinking in a series of compositions or a term paper.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: A3      District GE: A3      IGETC: None

**PHIL-065 - Introduction to Ethics****Units: 3**

This course explores some of the major ethical theories and problems of the past and present. Students are exposed to the concepts of good and evil, right and wrong, current ethical and social issues, and to the processes of formulating and making actual ethics-based decisions. Utilitarian and rule-based systems are studied, and through critical reasoning are applied in analyses, discussions, and in written assignments. Emphasis is on the real, the practical, and the applicable in everyday ethical situations.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Completion of PHIL 010

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

**PHIL-070 - Religion: The Live Hypothesis Units: 3**

This is an introductory philosophical survey of living religions (Hinduism, Buddhism, Confucianism, Taoism, Islam, Judaism, Christianity, Native American, and African) using comparative study that focuses on the meaning of religious experience, the forms its expression may take and what it may offer humanity.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 3B

***Photography*****PHOTO-022 - Beginning Photography Units: 3**

This course introduces students to black-and-white photography, with emphasis on both theory and practical application of pre-visualization and composition, exposing film, negative developing and darkroom printing. Students will learn fundamentals of design and composition and discuss how they relate to contemporary trends in photography. Students must provide their own 35 mm camera.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**PHOTO-062 - Intermediate Photography Units: 3**

Intermediate practice and theory of photography. The course will include black-and-white photography skills, color theory and vision, flash, lighting, digital imaging, and the history of photography. Students will discuss issues within photography, ways to conceptualize the finished image and how photography is used in print and electronic media. Students must provide their own 35 mm camera.

Lecture Hours: 2      Lab Hours: 4      Repeatable: No      Grading: L

Prerequisite: PHOTO 022 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Physical Education*****PED-009 - Beginning Badminton Units: 1**

Students learn the fundamental skills and knowledge of badminton. Students will also learn the foot work, strokes, singles and doubles strategies, rules and etiquette of the sport. Students learn badminton as a life-long activity including diet and nutrition.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: None      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-009A - Beginning Badminton Units: 1**

Develop Badminton skills and tactics for the beginner. Develop and improve shots and tactics in competitive play in both singles and doubles matches.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-009B - Intermediate Badminton Units: 1**

This course is an intermediate level class of badminton that includes skills, match play, and a review of the rules of the game. Improvement of individual skills, team techniques, and game strategies will be emphasized.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Completion of PED 009 or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-012 - Intermediate Basketball Units: 1**

Students learn intermediate basketball skills, team play and intermediate strategies of play. Students will also learn team unity and team respect.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-021 - Step Aerobics Units: 1**

This course is an introduction to the discipline of Physical Education through step aerobics. Students will learn techniques and choreography related to step aerobics, as well as the four health-related components of fitness: cardiorespiratory, flexibility, muscular strength and endurance, and body composition.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None



**PED-022 - Ultimate Fitness****Units: 1**

This course teaches the principles and concepts of cardiovascular fitness through activity in step training, aerobics with music, kickboxing, jogging and walking and use of variety aerobics exercise machines. Body mechanics, safe exercise parameters, tracking fitness levels and utilization of supplemental exercise apparatus will be accentuated.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-022A - Adapted Cross Training****Units: 1**

This course is designed to provide an individualized program for overall fitness for the student with a documented disability. The goal is to provide the student with the means to improve the health related components of fitness through a variety of fitness activities.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: Temporary or permanent verifiable disability and written verification provided by a physician or other appropriate professional.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-023 - Cardio Kickboxing****Units: 1**

Students are introduced to the dynamic kickboxing techniques which provide conditioning for both the aerobic and anaerobic systems. The freestyle interval format combines boxing and kicking drills specific to martial arts and kickboxing style movements integrating the mind/body elements of attitude, readiness, visualization, reaction and fun. Safe exercise parameters, tracking fitness levels and utilization of supplemental exercise materials will be emphasized. Fundamental exercise physiology, nutrition and wellness concepts related to cardiovascular exercise and individual variations due to age, gender, and/or genetics will be taught.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-024 - Beginning Golf****Units: 1**

This course is designed to teach the fundamentals of a golf swing using irons, fairway woods, and driver. Putting, chipping, and pitching skills will also be covered. Information on rules, scoring, etiquette, and course play will be included. Students will be required to pay for range balls and green fees.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-024A - Intermediate Golf****Units: 1**

This course is designed to teach the development of intermediate golf skills through instruction, practice, and golf play on local golf courses. The student will learn advanced swing techniques, practice strategies, strategies for positive mental skills, shot selection, and course management skills. Students will be required to pay for range balls and green fees.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-025 - Advanced First Aid, CPR & AED****Units: 2**

This course will teach students how to recognize and respond to an emergency. The student will be prepared to make appropriate decisions regarding first aid care and how to provide care for injuries or sudden illness until professional medical help arrives. Upon completion of this course, students will be eligible to take the exam for certification in Advanced First Aid, CPR, and AED.

Lecture Hours: 1      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-026 - Basketball - Competitive****Units: 1**

Competitive basketball is designed for the competitive player having a high experience in basketball. This course will prepare students for participation in basketball at the most advanced levels.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Recommended: A minimum of three years at the varsity high school, club experience or 3 semesters of PED 012.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-027 - Sports Officiating****Units: 3**

This class provides practical experience on the interpretation and knowledge of rules of team sports. The rules and mechanisms of officiating basketball, volleyball, soccer, softball/baseball. This course can be used for Recreation and Kinesiology majors, and people involved in community athletic organizations, junior and high schools, and community college. The course explores avenues of employment related to sports officiating.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**PED-031 - Lifetime Physical Fitness & Wellness Units: 3**

This course presents an overview of the concepts of physical fitness, training principles, appropriate exercise and health practices with application to lifelong health and exercise benefits. It includes lecture, laboratory, exercise, and physical fitness tests.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-033 - Introduction to Physical Education and Kinesiology Units: 3**

This course will explore the broad spectrum of Physical Education as an academic discipline and the required preparation and training for occupations involved with human movement, education, fitness, recreation, coaching, and wellness. This course is an in-depth overview of kinesiology, current issues, and professionalism. [PED-033 is the same as KINS-033]

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: 1  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-038 - Soccer-Recreational Units: 1**

This is a physical activity course designed to help students increase their knowledge and physical skills required for playing soccer successfully. This class will accommodate students with beginning and intermediate skill levels.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-039 - Hatha Yoga Units: 1**

Hatha Yoga focuses on understanding and controlling the body, breath and mind through postures or positions and breathing. The techniques are designed to increase range of motion, strength and endurance, balance and coordination. Methods for relieving stress, and the promotion of relaxation and meditation will be taught.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-039B - Hatha Yoga - Intermediate Units: 1**

This course is an intermediate level hatha yoga class. This yoga course offers a more in-depth practice of yoga postures including new postures. Different types of breath work will be introduced as well as essential techniques and information about yoga.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-039C - Mindfulness Fitness Units: 1**

This class is an introduction to the discipline of Physical Education through blending two areas of exercise: fitness walking and yoga. Students will increase the awareness of their walking mechanics of different types of indoor and outdoor walk programs. Students will learn to control and understand the body and mind through exercises and breathing techniques.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-039D - Partner Yoga Units: 1**

This course utilizes the forms and principles of Hatha Yoga individual postures while incorporating the presence of a partner to deepen the experience and the integration of trust, balance and creativity.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-040 - Softball Units: 1**

Students learn the fundamental softball skills of hitting, running, catching and throwing. Students learn the rules, terminology, strategies and etiquette of the game. Softball as a healthy lifelong activity will be emphasized.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*    Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-043 - Pilates Mat Workout****Units: 1**

Pilates is an exercise method that focuses on improving core muscle strength, flexibility, and body awareness through a progression of challenging and functional exercises performed on a mat. Pilates strengthens muscles through controlled movement patterns, focused breathing, and concentration.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-051 - Table Tennis****Units: 1**

This course is designed to teach the rules, etiquette, basic strokes, scoring, offensive and defensive strategy of table tennis. Singles and doubles play will be taught.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Open Curriculum: No prerequisite, corequisite or levels

*Advisory Level:*      Read: None      Write: None      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-053 - Walk/Jog****Units: 1**

Students will learn the principles and concepts of cardiovascular fitness through the activity of walking or jogging.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-055 - Aerobics with Music****Units: 1**

This course teaches high and low impact rhythmic exercise routines to music. It is designed to attain improvements in cardiovascular fitness, core strength, and flexibility.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-056 - Weight Training****Units: 1**

This is a physical activity course designed to teach students how to use progressive weight resistance exercises to develop muscular strength and endurance while using both free weights and weight machines.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PED-056A - Adapted Strength Conditioning****Units: 1**

This course is designed to provide an individualized muscle strength and conditioning program for the student with a documented disability. The student will learn proper skills and techniques and how to adapt fitness equipment to enhance muscle strength and endurance.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

Prerequisite: Temporary or permanent verifiable disability and written verification provided by a physician or other appropriate professional.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

**PED-062 - Soccer Theory****Units: 2**

This is a soccer theory course designed to provide in-depth analysis and review of competitive soccer programs and team play.

Lecture Hours: 2      Lab Hours: None      Repeatable: No      Grading: O

Recommended: Competitive playing or coaching experience in soccer.

*Advisory Level:*      Read: 2      Write: 2      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**PED-070 - Fitness Walking****Units: 1**

This course is designed to teach fitness walking. The student will learn fitness walking techniques, fitness walking exercise principles, and different fitness walking training programs. Students will participate in fitness walking throughout the semester and learn fitness walking measurement and evaluation techniques. This class is intended for walkers of any age, fitness level, and skill level.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: E      IGETC: None

***Physical Science*****PHYS-C-012 - Earth Science****Units: 4**

This course is an introduction to the main physical processes governing Earth's geosphere, atmosphere, and hydrosphere, highlighting the interactions of these systems with one another, and with the sun and other solar system bodies. Main topics include formation of the solar system, the theory of plate tectonics, and the interactions among tectonics plates as a driving mechanism constantly reshaping Earth's landscape. It also covers basic physical and chemical processes governing the rock cycle, the types of ocean boundaries, and the evolution of Earth's atmosphere. This is a G.E. physical science course with a lab component designed for nonscience majors.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: 2  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

***Physics*****PHYS-001 - Introductory Physics****Units: 3**

Physics 001 is an introductory investigation into the topics of physics for non-science majors. Topics include the fundamentals of the scientific method, mechanics, forces, conservation of momentum and energy, rotational motion, gravity, atomic physics, thermodynamics, waves (sound and EM), electricity and magnetism, optics, relativity and nuclear physics. The course content incorporates hands-on laboratory activities, in-class physical demonstrations, journaling, outdoor activities, homework, and a group project.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 111 with C or better, or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**PHYS-002A - Algebra/Trigonometry-Based Physics I****Units: 4**

This is the first of a two-semester course in general physics for students not needing calculus-based physics. Students will study basic principles of mechanics and thermodynamics such as Newton's laws of motion, work, and the conservation principles of energy and momentum, heat transfer, calorimetry, and the fundamental laws of thermodynamics.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 013 with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**PHYS-002B - Algebra/Trigonometry-Based Physics II****Units: 4**

This is the second algebra-based course in general physics, designed for students not majoring in engineering or physics, but required to fulfill their specific majors. In Physics 002B, the basic principles of vector operation, Newton's Laws of Motion, work, energy conservation, and linear and angular momentum are applied to topics in electricity, magnetism, optics, and modern physics.

Lecture Hours: 3      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: PHYS 002A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**PHYS-004A - General Physics****Units: 5**

This is the first course in the calculus-based physics sequence for majors in math, science, and engineering. Specific topics include kinematics, Newton's laws of motion, work and energy, momentum, rotation, simple harmonic motion, universal gravitation and fluids. Practical applications of these principles are discussed. A problem solving approach emphasizing both conceptual understanding and basic mathematical modeling is used.

Lecture Hours: 4      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: MATH 072 with C or better or equivalent

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**PHYS-004B - General Physics****Units: 5**

This course is one of a three-semester series in calculus-based general physics, serving students majoring in engineering, chemistry, physics, mathematics and other sciences. It emphasizes conceptual aspects of electricity, magnetism, circuits, and Maxwell's equations, and requires quantitative analysis of real world situations.

Lecture Hours: 4      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: PHYS 004A and MATH 073 with a grade of C or better, or PHYS 004A and concurrent enrollment in MATH 073

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

**PHYS-004C - General Physics****Units: 5**

This is one of a three-semester series of courses in calculus-based general physics, serving students majoring in engineering, chemistry, physics, mathematics and other sciences. Students are introduced to general principles of optics and thermodynamics at a calculus-based level. Several technological applications of these principles are discussed. Topics include waves, geometric optics, wave optics (including interference, diffraction, and polarization), heat, thermal properties of matter, and thermodynamics and its laws. Other topics include special relativity and modern physics. A problem solving approach is used, emphasizing both conceptual understanding and basic mathematical modeling.

Lecture Hours: 4      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: PHYS 004A and MATH 073 with a grade of C or better, or PHYS 004A and concurrent enrollment in MATH 073

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: B1,B3      District GE: B1, B3      IGETC: 5A, 5C

***Political Science*****POLSC-001 - Politics and Government in America****Units: 3**

This course covers the role and importance of the ideal of democracy and the evolution of the American and Californian political system. America's and California's political institutions (executive, legislative and judicial) and political processes (voting, lobbying, attitudes) are examined against the backdrop of America's and California's cultural diversity and political history. This course is a study of national, state and local government and politics with emphasis on the United States Constitution and the national and Californian governments. Note: Combined with HIST 1, meets US HIST & Constitution and State & Local Govt. requirements. Meets California Teachers Credential requirement.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, US-2, US-3      District GE: D, US-2,US-3      IGETC: 4

**Psychology****PSYCH-001 - General Psychology****Units: 3**

This behavioral science course is a basic introduction to the scientific study of the psychological, biological and environmental influences on behavior. It is a survey of traditional and contemporary theories and attitudes about perception, consciousness, learning, memory, thinking, human development, intelligence emotions, motivation, personality, stress/adaptation, abnormal behavior/ treatment, and the social world. It is designed to give insight into oneself and others.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**PSYCH-018 - Introduction to Research Methods****Units: 3**

This course is an introduction to the experimental and correlational methods used in psychological research. Students will learn to research the literature, design and perform experimental and non-experimental research, and write reports on the research findings. Students will perform statistical analyses on data collected from research conducted during lab sessions

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Prerequisite: PSYCH 001 or PSYCH 010 and MATH 063 with C or better

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**PSYCH-020 - Psychology of Stress Reduction****Units: 3**

Students are presented a comprehensive approach to stress and stress reduction from a psychological perspective. A psychophysiological model of stress will be presented and analyzed. A variety of evidenced-based stress reduction methods will be taught in the contexts of student and work life settings.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Completion of PSYCH 001

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: E      District GE: E      IGETC: None

**PSYCH-025 - Psychology of Women: Global Perspective****Units: 3**

This course examines the female experience from a global, historical, familial, cultural and psychological framework, and analyzes how women's lives are shaped by social and economic institutions, political movements, ethnicity, race and individual experiences. Psychological theories and current research will address concepts of development, gender-typing, sexism, motherhood, work, adaptation, well being as well as other psychological questions of central concern to women.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E, ES      IGETC: 4

**PSYCH-026 - Violence Against Women: Cross-Cultural Perspective****Units: 3**

This course presents an overview of various forms of violence against women and girls from a global and human rights perspective through critical examination of social structures and psychological research. Contemporary attitudes towards women, children, power, aggression, sexuality, race and class will be investigated. Topics will include, rape, wife beating, incest, sexual harassment, sex trafficking, pornography, honor and dowry killing, and economic, psychiatric and military violence. The course will also consider the ways in which women are individually and collectively combating these various forms of violence.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: PSYCH 025

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: None

**PSYCH-030 - Introduction to Biological Psychology****Units: 3**

This course is designed to provide an overview of biological approaches to understanding behavior. The course will cover the general organization of the neural and neuroendocrine systems and their influences in the control of behavior. Animal and human research findings, within the science of brain-behavior relationships, will be included. This course is designed to prepare students for more advanced courses in behavioral neuroscience, clinical psychology, and other health-related fields. It is a required course for psychology majors.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: PSYCH 001 or PSYCH 010

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**PSYCH-051 - Introduction to Cross-Cultural Psychology****Units: 3**

Students will examine how individuals' behavioral, developmental, and cognitive phenomena are differentially affected by culture and subculture. Emphasis on the diversity of parent-child relationships, role of women and men, adult personality and beliefs, attitudes and values. Service-Learning is included in this course.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Enrollment in or completion of Psychology 001

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**PSYCH-060 - Personal Growth and Adjustment****Units: 3**

This course is a study of psychological processes through which people manage to cope with the demands and challenges of everyday life. A broad variety of topics are examined including personality patterns, stress, social and intimate relationships, adjustments to development through the life span and psychological/physical wellness as they influence and are affected by adjustment. Effective and ineffective personal growth and adjustment are analyzed in the context of contemporary and complex society.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

**Advisory Level:**      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E      IGETC: 4



**PSYCH-092 - Developmental Psychology****Units: 3**

This course is an introduction to developmental psychology. Human development is traced from conception through death and dying. The biological, cognitive, psychological, social and cultural factors affecting development and the integration and interactions of these factors throughout the lifespan of human beings will be studied. The dynamic interrelationship of these factors to the uniqueness of, and differences between, individuals will also be considered. Development tasks and potential developmental crises in the contemporary multicultural society are identified for each age group.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E      IGETC: 4

**PSYCH-096 - Marriage, Family, and Intimate Relationships****Units: 3**

Students will study the family, marriage and relationship from psychological, historical and intercultural perspectives. Topics to include gender socialization and inequality, personality development, dating, Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) relationships, marriage, family violence, divorce, and remarriage, and how they relate to psychological well-being.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E      IGETC: 4

**PSYCH-099 - Abnormal Psychology****Units: 3**

This introductory course surveys the multidimensional influences on the diagnosis, etiology, and treatment of abnormal patterns of behavior. Traditional psychological models, as well as current research evidence of the reciprocal relationship of biology and behavior, are used to study psychopathology. Clinical cases are used to examine life-span cultural influences on abnormal behavior.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Completion of PSYCH 010 recommended

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**PSYCH-100 - Human Sexuality****Units: 3**

This course is designed to offer scientific information on human sexual functioning. It will include current research findings related to sexual behavior, social learning of sexual roles, anatomy and physiology of sexual response, social-cultural influence pertaining to sexual behavior, sexual adjustment and maladjustment. The course will also include topics covering sexual orientations and legal and political aspects of sexual behavior.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D, E      District GE: D, E      IGETC: 4

***Service Learning*****SERV-001 - Introduction to Community Service-Learning****Units: 1**

This course offers students community-based learning through classroom instruction and critical reflection to arrive at a personal understanding of the need and importance for community service, civic responsibility, cultural competence and activism for social justice. The course will include community service in a non-profit organization or school of choice that meets a real need in the community.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Sign Language*****SL-001A - Introduction to American Sign Language****Units: 3**

This is a language course providing beginning American Sign Language instruction in both expressive and receptive signing. The student will learn vocabulary, grammar, cultural behaviors, Deaf culture, the American manual alphabet, and the manual number system. Emphasis will be on a visual learning through practice dialogues and classroom activities. This course satisfies both foreign language requirements, GE requirements, and can lead to bilingual employment certification.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: None

**SL-001B - Intermediate American Sign Language****Units: 3**

This course is designed to enable second semester students of American Sign Language to become more fluent in their language acquisition. The student will continue learning vocabulary, grammar, cultural behaviors, Deaf culture, the American manual alphabet, and the manual number system. Students are challenged to sign longer expressive dialogues, to comprehend more complicated dialogues, and self-generated short stories, which will help develop intermediate conversational skills.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: O

Prerequisite: SL 001A, with C or better, or two years of High School ASL, or the equivalent

Recommended: Review of SL 001A material

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A

***Sociology*****SOC-010 - Introduction to Sociology****Units: 3**

This course is a survey of the principles and basic concepts of sociology. It includes the analysis of American culture, social organization, group behavior, social stratification, racial and ethnic groups, and the dynamics of social change and other social processes.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**SOC-011 - Social Problems****Units: 3**

Students explore sociological perspectives on contemporary social problems in the United States. Students examine the social processes through which issues come to be viewed as social problems and the dynamics through which groups attempt to respond and solve these problems.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: D      District GE: D      IGETC: 4

**Spanish****SPAN-001A - Elementary Spanish****Units: 5**

This is the first of two courses designed to develop basic ability to understand, speak, read, and write the Spanish language. Course content includes aspects of the culture of Latin America and Spain. Not recommended for native speakers of Spanish. This course corresponds to two years of high school study.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A

**SPAN-001B - Elementary Spanish****Units: 5**

This is the second of two courses designed to develop the basic ability to understand, speak, read, and write the Spanish language. Course content includes aspects of the culture of Latin America and Spain.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 001A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A

**SPAN-002A - Intermediate Spanish****Units: 5**

This course will further develop oral and written communication, review and apply Spanish grammar, and increase cultural awareness and vocabulary at the advanced novice to mid intermediate level.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 001B with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A, 3B

**SPAN-002B - Intensive Intermediate Spanish****Units: 5**

This is a course designed to further develop conversation, composition, review of the structure of the Spanish language, oral and written expression. Students will also study literary and journalistic readings in Spanish, and expand cultural awareness.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 002A with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A, 3B

**SPAN-020A - Spanish for Spanish Speakers****Units: 5**

This is the first in a two-course sequence designed to serve the needs of students whose first or home language is Spanish. This course will focus on the development of 1) reading skills through Spanish and Latin American essays, short stories, journalistic writings; 2) writing skills, awareness of English interference, and understanding of dialectal differences; 3) oral expression and critical thinking through commentary and cultural/historical presentations.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Recommended: Demonstrate basic conversational skills in Spanish as first or home language through a minimum 1 page essay and an interview with the instructor.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A, 3B

**SPAN-020B - Spanish for Spanish Speakers****Units: 5**

This is the second in a two-course sequence specially designed to serve the needs of students whose first or home language is Spanish. This course will focus on the continuing development of 1) reading skills through Spanish and Latin American essays, short stories, journalistic writings; 2) writing skills, awareness of English interference, and understanding dialectal differences; and 3) oral expression and critical thinking through commentary and cultural/historical presentations.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 020A

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A, 3B

**SPAN-031 - Introduction to Translation and Interpreting****Units: 4**

This course will cover the historical origins, theories, techniques, and practices of translating and interpreting. Students will focus on comprehension of source language texts and accurate expression of content and style in translations. Theoretical readings will be used to familiarize students with strategies, techniques, and challenges faced in the translation process.

Lecture Hours: 4      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Recommended: Native fluency in Spanish (or equivalent) required. Student must see instructor prior to enrollment.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SPAN-032 - Spanish Grammar and Composition Units: 3**

Students will develop reading and writing skills through the process of composition. Students will also improve such writing skills by applying the rules of grammar and orthography reviewed in class. This course is required for the Translation and Interpreting Certificate.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

Recommended: Native fluency in Spanish (or equivalent) required. Student must see instructor prior to enrollment.

*Advisory Level:*    Read: 3              Write: 3              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-033 - Spanish/English Linguistics Analysis Units: 3**

This course will provide the student with an analysis and description of some of the most relevant aspects of Spanish/English grammar, emphasizing the implications on translation and interpreting.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

Prerequisite: SPAN 032, with C or better

Recommended: ENGL 001A, minimum grade "C", highly recommended

*Advisory Level:*    Read: None              Write: None              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-035 - Sight Translation Units: 3**

This course will introduce students to the fundamental skill of sight translation. Students will learn how to comply with the legal equivalence requirements of this mode of interpretation. There will be emphasis on reviewing the necessary reading comprehension skills, acquiring the ability to analyze text upon first reading, acquiring vocabulary research skills, expanding vocabulary and understanding the role of the interpreter. Students will practice paraphrasing, chunking, prediction and expanding and condensing exercises to finally develop the skills necessary for performing sight translation of complex texts.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*    Read: 4              Write: 4              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-036A - Consecutive Interpretation I Units: 3**

This course will introduce students to consecutive legal interpretation. Students will learn how to comply with the legal equivalence requirements of consecutive interpretation. They will also be introduced to the proper usage of this mode of interpretation at various settings. There will be a focus on memory building skills as well as note-taking techniques. Students will begin to develop their own notetaking system and symbols. Through guided exercises students will continue to build vocabulary and learn how to deal with various factors encountered when using the consecutive mode of interpretation.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 035 with C or better

*Advisory Level:*    Read: 4              Write: 4              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-036B - Consecutive Interpretation II Units: 3**

This course builds on the skills acquired in Consecutive Interpretation I. Students will continue to enhance retention while developing personal note-taking systems in more demanding situations with lengthier messages. There will be an emphasis on complying with the legal equivalence requirement and limiting omissions. Students will learn how to deal with challenges to interpretation and make corrections on the record. Students will acquire terminology related to complex criminal proceedings, administrative hearings and varied medical settings.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 036A with C or better

*Advisory Level:*    Read: 4              Write: 4              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-037A - Simultaneous Interpretation I Units: 3**

This course will introduce students to simultaneous legal interpretation. Students will learn how to comply with the legal equivalence requirements of simultaneous interpretation. There will be emphasis on reviewing the history of simultaneous interpretation, the role of the interpreter, relevant settings and research skills. Students will practice paraphrasing, chunking and shadowing exercises to increase vocabulary and create a strong foundation to begin acquiring simultaneous interpreting skills up to 125 words per minute.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 035 with C or better

*Advisory Level:*    Read: 4              Write: 4              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-037B - Simultaneous Interpretation II Units: 3**

This course will continue to build students simultaneous interpretation skills. Students will begin to interpret more complex legal proceedings at faster speeds. Students will be introduced to testimony of expert witnesses, legal motions, jury instructions, and other complex materials. Students will also acquire the skills necessary to build glossaries for complex proceedings and in the process expand vocabulary to include terminology related to drugs, violence, medical, weapons, DNA and other specialized topics. At the conclusion of course students will be able to interpret proceedings at speeds of 145+ wpm.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 037A with C or better

*Advisory Level:*    Read: 4              Write: 4              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-091A - Conversational Spanish Units: 3**

This three-unit course is designed to develop oral and listening communication skills through vocabulary improvement, listening comprehension, pronunciation, and grammar. In addition the students will develop an ability to use the Spanish language in everyday situations and become acquainted with some aspects of the Hispanic culture.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

*Advisory Level:*    Read: 3              Write: 3              Math: None  
Transfer Status: CSU                      Degree Applicable: AA/AS  
CSU GE: None              District GE: None              IGETC: None

**SPAN-091B - Conversational Spanish****Units: 3**

This is the second of two courses designed to increase oral and listening communication skills through vocabulary improvement, listening comprehension, pronunciation and grammar, that will result in the development of an ability to use Spanish language in everyday situations and become acquainted with some aspects of the Hispanic culture.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: SPAN 091A, with C or better

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Surveying and Geomatics*****SG-100 - Applied Math for Land Surveying****Units: 1**

This course presents math concepts and skills required in land surveying and mapping. The course covers topics in geometry and trigonometry related to surveying problem-solving. Intersections of lines and circles are discussed and so are the formulas used in horizontal and vertical curves.

Lecture Hours: None      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: Completion of geometry, in high school or college, is strongly recommended

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-141 - Boundary Control and Legal Principles****Units: 3**

This course provides the student with an understanding of and the ability to apply legal principles used in determining land boundaries. The student will understand the importance of recovering monuments and how to address lost monuments in analyzing a land boundary. This course will also provide the student with the general background for areas of the land surveyor examination and the National Council of Examiners for Engineering and Surveyors (NCEES) Land Surveyors-In-Training examination devoted to this topic. Discussions include land ownership, title, conveyances and legal descriptions of real properties, types of land boundaries, boundary laws and presumptions, resurveying and retracing, easements, conveyances and the role of the land surveyor.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Recommended: ENGR 060 and 061; Surveying Experience

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-142 - California Coordinate System****Units: 1**

This course introduces students to the theory of the California Coordinate System and its application in modern surveying and geomatics practices; conversion of geodetic coordinates to and from state plane coordinates; zone to zone conversion; and converting lengths to and from the grid to ground. This course will also provide the student with the general background for areas of the land surveyor examination and the National Council of Examiners for Engineering and Surveying (NCEES) Land Surveyors-In-Training examination devoted to this topic.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

Recommended: ENGR 060 and SG 100

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-143 - Introduction to Photogrammetry****Units: 1**

This course provides an introduction to principles of photogrammetry, geometry of photographs, flight planning, ground control, airborne laser mapping (LIDAR - Light Detection And Ranging), airborne GPS, stereoscopic plot, Unmanned Aircraft Systems (UAS-drones), orthophoto, photogrammetric mapping, applications, and photogrammetric instrumentation. This course will also provide the student with the general background for areas of the land surveyor examination and the National Council of Examiners for Engineering and Surveying (NCEES) Land Surveyors-In-Training examination devoted to this topic.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

Recommended: 1. ENGR 060 and 061  
 2. Surveying experience

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-145 - Astronomy for Surveyors****Units: 1**

This course provides an introduction to astronomical procedures relating to the determination of latitude, time, and azimuth as observed with the surveying instruments. This course will also provide the student with the general background for areas of the land surveyor examination and the National Council of Examiners for Engineering and Surveying (NCEES) Land Surveyors-In-Training examination devoted to this topic.

Lecture Hours: 1      Lab Hours: None      Repeatable: No      Grading: L

Recommended: 1. ENGR 060 and 061  
 2. Surveying experience

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-146 - CADD for Civil Engineering, Surveying and Land Development****Units: 3**

This is a course on computer-aided design and drafting for civil engineering, surveying and land development. AutoCAD Civil 3D software program will be utilized. Students will acquire the necessary computer skills to use the software for applications in civil engineering design, surveying and land development projects. Topics include basic drawing component management, terrain surface modeling and contours, alignments and stationing, cross sections, volume computation, and profiles. In addition, the course will discuss various applications in civil engineering and land surveying.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: SG 100, ENGR 018, ENGR 060

*Advisory Level:*      Read: 3      Write: 3      Math: 4  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-147 - Global Positioning System for Land Surveying****Units: 3**

Fundamentals of the global positioning system (GPS) and its applications in land surveying are introduced. The discussions include the three segments of GPS technology, i.e., the space segment that consists of a constellation of 24 satellites orbiting around the earth, the control segment that consists of five ground monitoring stations, and the user segment that consists of two categories of receivers. Among the topics studied are GPS observations, planning for a GPS field survey, GPS data processing, and GPS surveying techniques. Emphasis is given to practical applications of GPS technology in surveying.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: ENGR 061, or equivalent.

*Advisory Level:*      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

**SG-148 - Maps, Subdivision Map Act and Land Surveyors Act Units: 3**

This course is designed to present both theoretical and practical mapping experience in the preparation of subdivision maps, records of surveys, plats, exhibits, topographic maps, American Land Title Association (ALTA) maps, route and rights-of-way maps. Requirements of the Subdivision Map Act and the Land Surveyors Act are studied. Techniques of the reduction of field survey notes and the preparation of improvement plans are also presented. This course will also provide the student with the general background for areas of the land surveyor examination and the National Council of Examiners for Engineering and Surveying (NCEES) Land Surveyors-In-Training examination devoted to this topic.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: 1. ENGR 060 and 061  
2. SG 141 or ENGR 063  
3. SG 146

*Advisory Level:*      Read: 3      Write: 3      Math: None  
Transfer Status: CSU      Degree Applicable: AA/AS  
CSU GE: None      District GE: None      IGETC: None

**SG-149 - 3D Laser Scanning for Land Surveying Units: 3**

This course introduces students to 3D laser scanning for land surveying. The fundamental principles of 3D laser scanning are discussed. The implementation of time-of-flight measurement and interaction of laser beams with various types of surfaces are examined. Students will learn the structure of a 3D laser scanner, its operation in the field, data collection and geo-referencing. Topics on post-measurement processing include data transfer to an office computer, point cloud registration and calibration, data filtering and checking, mesh and surface generations, digital image calibration, 2D drawing generation, feature code management and animations. Several applications in land surveying are discussed.

Lecture Hours: 2      Lab Hours: 3      Repeatable: No      Grading: L

Recommended: ENGR 060, with minimum grade C

*Advisory Level:*      Read: 3      Write: 3      Math: 3  
Transfer Status: CSU      Degree Applicable: AA/AS  
CSU GE: None      District GE: None      IGETC: None

**SG-500 - Introduction to Surveying & Geomatics Units: None**

This introductory course in surveying and geomatics details various aspects of the surveying profession. It includes information on the past and current technologies that are utilized in performing land surveys. Various fields such as land surveying, remote sensing, geographic information systems, global navigation satellite systems, photogrammetry, and mapping are introduced. Preparation and skills needed to successfully complete a surveying and geomatics education and compete in the profession are detailed. Some historical perspective is included in order to provide a comprehensive view of the field. This course is intended to provide a general overview of the surveying field to those who are planning on pursuing a vocational technical career.

Lecture Hours: 1.5      Lab Hours: None      Repeatable: Yes      Grading: N

Recommended: Be able to use computers and the Internet

*Advisory Level:*      Read: 2      Write: 2      Math: None  
Transfer Status: None      Degree Applicable: NC  
CSU GE: None      District GE: None      IGETC: None

**SG-502 - Basic Math Applications in Surveying and Geomatics Units: None**

This application-oriented course is for those who are interested in pursuing a surveying and geomatics career. Problems and calculations encountered in land surveying, GPS, GIS, photogrammetry, boundary and legal principles, mapping, and laser scanning areas are discussed and practiced through the use of appropriate basic math concepts. This course is intended to encourage and attract students into the surveying profession by providing a basic training and understanding of how technical problems are solved using basic math concepts such as operations of fractions and decimals, percent, ratios and proportion, calculator usage, signed numbers, evaluating formulas, equation solving, geometry, the metric system, and measurement tools.

Lecture Hours: 2      Lab Hours: 3      Repeatable: Yes      Grading: N

Recommended: Be able to use computers and the Internet

*Advisory Level:*      Read: 2      Write: 2      Math: None  
Transfer Status: None      Degree Applicable: NC  
CSU GE: None      District GE: None      IGETC: None

**SG-504 - Technical and Contextualized Communication Units: None**

This course is designed to develop proficiency in specific integrated and contextualized reading, writing, visualization, and speaking skills and strategies relevant to technical and scientific professions. Topics include reading and writing processes, critical thinking strategies, recognition and composition of coherent and unified texts, effective visualization and public speaking. Through individual and collaborative projects, students will gain practice in researching, designing, and evaluating appropriate communications for varying rhetorical situations. Using both print and computer-based technologies, students will develop abilities to create and critically analyze documents so that they engage and inform readers in a variety of circumstances.

Lecture Hours: 2      Lab Hours: 3      Repeatable: Yes      Grading: N

Recommended: Be able to use computers and the Internet

*Advisory Level:*      Read: 2      Write: 2      Math: None  
Transfer Status: None      Degree Applicable: NC  
CSU GE: None      District GE: None      IGETC: None

**SG-506 - Basic Principles of Surveying Units: None**

This course is a survey of basic principles and concepts used in surveying and geomatics. Students are exposed to applications of these concepts in order to provide basic understanding of the field of surveying and survey design through hands-on activities and problem-based learning. Topics include principles of land surveying, mapping, photogrammetry, astronomy, coordinate systems, geographic information system, global positioning systems, civil 3D CADD, and laser scanning. Team work in performing projects is an essential component of the course which challenges students to continually improve their interpersonal skills, creative abilities, and problem solving skills based upon surveying concepts.

Lecture Hours: 2      Lab Hours: 3      Repeatable: Yes      Grading: N

Recommended: Be able to use computers and the Internet

*Advisory Level:*      Read: 2      Write: 2      Math: None  
Transfer Status: None      Degree Applicable: NC  
CSU GE: None      District GE: None      IGETC: None



**Sustainable Energy Technologies & Systems****SETS-010 - Energy Systems and Sustainability Units: 3**

This course provides an overview of the science of energy, and the physical, environmental, and socio-economic impacts of its production and use. Students will examine sustainable energy technologies, including non-conventional fossil fuels, renewable energy sources, and nuclear power. The course will take a systems approach to examining the challenge of achieving a sustainable energy future.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: 2  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: B1 District GE: B1 IGETC: 5A

**Theatre Arts****THEAT-010 - Beginning Screenwriting Units: 3**

In this course, students are introduced to and use the basic principles of screenwriting to develop story ideas, gain an understanding of narrative structure, character development, write effective dialogue, and become familiar with professional script terminology and format. Students will learn to formulate constructive critiques of their own work and the work of others.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: None District GE: None IGETC: None

**THEAT-020 - Introduction to Theatre Units: 3**

Students study the aesthetics of drama and theatre from their origin through modern theatre practice. Students will examine: plays, playwrights, theatrical design, acting, directing, theatre architecture, the role of the audience, cultural and socio-political effects, production values and dramatic genres.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: C1 District GE: C1 IGETC: 4A

**THEAT-025A - Theatres of Diversity: Chicano/Latino Theatre Units: 3**

This is a survey course designed for the general public to study the history and practice of Chicano/Latino Theatre. Emphasis will be placed on the development of Chicano and Latino theatre in the United States. Specific areas of interest will include the Chicano/Latino theatre movement in San Jose and California. Students will also participate in the elements of creating and performing Chicano/Latino theatre.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Recommended: Read Latino dramatic literature. Attend teatro performances.

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: C1 District GE: C1, ES IGETC: 4A

**THEAT-034 - Studio Theatre Performance Units: 3**

Students participate in rehearsals and performances of a studio theatre production. After enrolling in the class, auditions will be held for performance roles. Attendance is mandatory at all rehearsals and performances.

Lecture Hours: 1 Lab Hours: 6 Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: None District GE: None IGETC: None

**THEAT-040 - Introduction to Film Units: 3**

This is an introductory course in film studies in which students view films and learn to understand the artistic disciplines of film making. Film content is examined in relationship to cinematography, editing, visual design, special effects, sound design, acting, directing, social and cultural contexts.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: C1 District GE: C1 IGETC: 3A

**THEAT-045 - Shakespeare on Film Units: 3**

In this course students read and study Shakespeare's plays and view and study Shakespeare's plays on film. They will study the nature of adaptation, character development, story structure, visual style, and compare and contrast different films of the same play.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: C1 District GE: C1 IGETC: 3A

**Vietnamese****VIET-001A - Elementary Vietnamese Units: 5**

This is the first course in Vietnamese with emphasis on understanding, speaking, reading and writing. Essential components include pronunciation, vocabulary, grammar and syntax, cultural backgrounds and an introduction to Vietnamese literature and culture. This course corresponds to two years of high school Vietnamese language study.

Lecture Hours: 5 Lab Hours: None Repeatable: No Grading: L

Recommended: Highly recommend completion of VIET 091A or 091B

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU/UC Degree Applicable: AA/AS  
CSU GE: C2 District GE: C2 IGETC: 6A

**VIET-001B - Elementary Vietnamese****Units: 5**

This is the second course in Vietnamese with emphasis on understanding, speaking, reading and writing. Students further develop skills in oral and written communication in the Vietnamese language. Students will cover essential language components including spelling, pronunciation, intonation, vocabulary, grammar, syntax structure, as well as continue examination of Vietnamese literature and culture.

Lecture Hours: 5      Lab Hours: None      Repeatable: No      Grading: L

Prerequisite: VIET 001A with C or better

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU/UC      Degree Applicable: AA/AS  
 CSU GE: C2      District GE: C2      IGETC: 6A

**VIET-091A - Conversational Vietnamese and Culture****Units: 3**

This course is designed for students desiring a basic, practical conversational approach to learn the Vietnamese language. The course emphasizes conversation and vocabulary building with a minimal amount of grammar. A variety of classroom activities will permit the students to actively use the language. Cultural topics will center on Vietnamese customs and traditions, including family concepts, religions, special events and food, as well as the history of Vietnam.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Advisory Level:      Read: 3      Write: 3      Math: None  
 Transfer Status: CSU      Degree Applicable: AA/AS  
 CSU GE: None      District GE: None      IGETC: None

***Water/Wastewater Technology*****WWT-100 - Calculations in Water/Wastewater Technology****Units: 3**

This course is the study of the mathematical principles and methods involved in solving problems related to water and wastewater treatment, distribution, and collection systems, including volume, flow rate, velocity, pressure, force, unit conversions, dimensional analysis, chemical dose rates, dilutions, filter loading and backwash rates.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 3  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-101 - Fundamentals of Water Quality and Wastewater Technology****Units: 3**

This course provides a broad overview of the water quality and wastewater fields and issues confronting the industry. Students will learn how source waters are obtained, treated, and distributed and how wastewater is collected, transported, disposed, and recovered in the area. Contemporary issues facing the water and wastewater technology will be explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Advisory Level:      Read: 4      Write: 4      Math: 3  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-102 - Introduction to Electrical and Instrumentation Processes****Units: 3**

This is an introductory course in basic electronic, electrical, and control system principles. Electrical safety precautions, component identification, schematic interpretation, motors, transformers, relays and test equipment will be studied. Automated process control devices and an overview of current technologies will be discussed.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-103 - Basic Plant Operations: Water Treatment****Units: 3**

This course is the study of the sources of water and the public health aspects of water supply; chemical, physical and bacteriological standards of water quality; types of water treatment plants; water treatment procedures, operation, maintenance, storage and distribution.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-104 - Basic Plant Operations: Wastewater Treatment****Units: 3**

This course is an introduction to the basic principles involved in the operation of conventional public wastewater treatment plants. The course provides information on plant hydraulics, preliminary, primary and secondary treatment processes, disinfection, as well as environmental and safety regulation compliance.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-105 - Water Distribution Systems****Units: 3**

This course is the study of the operation and maintenance of water supply and distribution systems. Water sources, water quality, treatment methods, distribution operations, customer metering, pipeline installation and repair, valves and appurtenances, storage tanks, and maintenance topics will be discussed. Mathematical and hydraulic formulas and principles to determine volume, flow, pressure and force will be discussed. This course is part of a series required for eligibility to take the California Department of Public Health (CDPH) Water Distribution Operator certification examinations and supports certification examinations for CDPH Water Distribution Operator grade D1 and D2.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 2  
 Transfer Status: None      Degree Applicable: NAA  
 CSU GE: None      District GE: None      IGETC: None

**WWT-106 - Wastewater Collection Systems Units: 3**

This course is the study of the components of wastewater collection systems. It is an overview of design installation, operation, monitoring, maintenance and repair of sewer pipelines, pump stations and related facilities.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L  
Credit by Exam: Yes

Advisory Level:      Read: 2      Write: 2      Math: 2  
Transfer Status: None      Degree Applicable: NAA  
CSU GE: None      District GE: None      IGETC: None

***Women's Studies*****WOMS-010 - Introduction to Women's and Gender Studies Units: 3**

This course will explore women's and gender theories and the perspectives of women from different ethnicities, ages, social groups and social classes, along with contemporary definitions and values that affect women's livelihoods. Perspectives on cultural, ethnic, and gender similarities and differences will be examined. Issues and experiences affecting transgender, sexual orientation will be explored.

Lecture Hours: 3      Lab Hours: None      Repeatable: No      Grading: L

Advisory Level:      Read: 3      Write: 3      Math: None  
Transfer Status: CSU/UC      Degree Applicable: AA/AS  
CSU GE: D      District GE: D, ES      IGETC: 4

***Work Experience*****WE-088 - General Work Experience Units: 1 - 6**

The Cooperative Work Experience program is designed to assist students expand their career options and develop new job skills. A maximum of 6 six units of General Work Experience may be earned. Internship/Job Placement is not guaranteed.

Lecture Hours: None      Lab Hours: 2.07      Repeatable: 5      Grading: O

Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status.

Advisory Level:      Read: 3      Write: 3      Math: None  
Transfer Status: CSU      Degree Applicable: AA/AS  
CSU GE: None      District GE: None      IGETC: None

