

# MECHANICAL TECHNOLOGY

## MECH 010 Basic Welding for the Trades **Units 4**

*Prerequisites: None.*

*Prerequisite Skills: None.*

*Corequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide the student who basic welding skills. The course covers basic theory, practice and application of metal joining processes, metal cutting, and welding for ferrous and nonferrous metals and alloys. Welding methods include: oxy-acetylene, shielded metal arc welding, and metal inert gas (MIG) welding. (CSU)

## MECH 011A Basic Welding for the Trades **Units 2**

*Prerequisites: None.*

*Prerequisite Skills: None.*

*Corequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide basic welding skills. The course includes basic theory, practice and application of metal joining processes, metal cutting, shielded metal arc, and oxy-acetylene welding. MECH 11A and MECH 11B are equivalent to MECH 10. (CSU)

## MECH 011B Welding for the Trades **Units 2**

*Prerequisites: None.*

*Prerequisite Skills: None.*

*Corequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide basic welding skills. The course includes basic theory, practice and application of metal joining processes, including shielded metal arc, and an introduction to applications for non-ferrous metals and alloys using metal inert gas (MIG) welding and tungsten inert gas (TIG) welding. MECH 11A and MECH 11B are equivalent to MECH 10. (CSU)

## MECH 015 Machine Tool Process **Units 3**

*Prerequisites: None.*

*Prerequisite Skills: None.*

*Corequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is for the student who plans to enter occupations in metals technology, manufacturing, engineering, and related fields. The student will learn theory and operation of metal-working machines including lathes, grinding machines, milling machines, drill presses, sawing machines, and computer numerical control (CNC) lathe and milling machine. Topics include cutting tools, measuring tools and instruments, welding, casting, heat treatment of steel, production setups, and Computer Numerical Control (CNC) machines. A combined program of lecture and laboratory allows the student to have hands-on experience with a variety of machinery processes. (CSU)

## MECH 030A Refrigeration and Air Conditioning **Units 3**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce the student to the proper skills required to maintain and service refrigeration and air conditioning systems. The student learns how to charge, evacuate, and recover refrigerants utilizing common equipment found in the industry. (CSU)

## MECH 030B Refrigeration and Air Conditioning **Units 3**

*Prerequisites: MECH 30A with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to develop skills necessary to service and repair systems found in the refrigeration and air conditioning industry. (CSU)

## MECH 030C Advanced Refrigeration **Units 3**

*Prerequisites: MECH 30B with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to develop skills necessary to service and repair commercial and industrial refrigeration systems. The student works on industrial systems as well as other advanced projects. (CSU)

## MECH 031A Air Conditioning Components and Circuits **Units 6**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide the student with the fundamentals of heating and air conditioning. Emphasis is placed on the electrical and mechanical theories of operation related to common heating and air conditioning equipment. The course includes basic electricity, basic circuits, common electrical components, and applications to heating and air conditioning. (CSU)

## MECH 031B Air Conditioning Troubleshooting **Units 6**

*Prerequisites: MECH 31A with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to enable the student to develop skills necessary to properly install split and packaged air conditioning systems. This course includes operation, maintenance, and repair procedures for various heating and air conditioning systems. (CSU)

## MECH 031C Air Conditioning Systems and Heat Pumps **Units 6**

*Prerequisites: MECH 31B with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide the fundamentals of electrical and mechanical operation of heat pumps and chilled water systems. The course includes sequence of operation, temperature, pressure, and electrical analysis. (CSU)

**MECH 031D Commercial Air Conditioning Design and Operation** **Units 6**

*Prerequisites:* MECH 31C with “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to develop skills necessary for calculating residential and commercial cooling loads and duct design. The course includes chiller operation and maintenance. (CSU)

**MECH 032A Air Conditioning Control Circuit Analysis** **Units 3**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce the selection, application, and maintenance of automatic controls generally found in the air conditioning industry. The course includes the different types of controls found in residential, commercial, and industrial applications. Schematics involving the various controls are used to analyze control problems. (CSU)

**MECH 032B Refrigeration Control Circuit Analysis** **Units 3**

*Prerequisites:* MECH 32A with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce the student to basic refrigeration controls found in domestic and industrial refrigeration systems and progresses up to industrial refrigeration controls. Instruction includes introduction to control theory, application, and electrical trouble-shooting. (CSU)

**MECH 032C Heating and Air Conditioning Commercial Controls** **Units 3**

*Prerequisites:* MECH 32B with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce the student to the basic commercial controls used in the heating and air conditioning industry. The student works with basic set-ups of both pneumatic and direct digital control systems. (CSU)

**MECH 050A Introductory Machine Shop** **Units 8**

*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is based on the study of machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. Topics include precision instruments, hand tools, layout, and the operation of drill presses, grinding machines, milling machines, lathes, sawing machines, with an emphasis on lathe. (CSU)

**MECH 050B Beginning Machine Shop** **Units 8**

*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is based on the skills and knowledge learned in MECH 50A, Introductory Machine Shop. The course combines the study of machine tool theory blueprint reading, and related mathematics with hands-on shop experience. Topics include advanced layout and use of precision instruments and hand tools, advanced operation of drill presses, grinding machines, lathes, sawing machines, with an emphasis on the milling machine. (CSU)

**MECH 050C Intermediate Machine Shop** **Units 8**

*Prerequisites:* None.  
*Prerequisite Skills:* 1. Machine tool operation skills.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is based on the skills and knowledge learned in MECH 50B, Beginning Machine Shop. The course combines the study of machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. The major emphasis of the course is the programming of the Computer numerical control (CNC) lathe and the CNC milling machine. The student writes programs in the “G” and “M” code format and uses programs to operate the CNC machine tools. Computer aided drafting/computer aided machining (CAD/CAM) software will be introduced. Programming topics include tapers, arcs, turning cycles, threading, drilling, grooving, parting off, and cutter radius compensation. (CSU)

**MECH 050D Advanced Machine Shop** **Units 8**

*Prerequisites:* None.  
*Prerequisite Skills:* 1. Machine tool operation skills.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is based on the knowledge and skills learned in MECH 50C, Intermediate Machine Shop. The course combines the study of machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. The emphasis of the course is Computer-Aided Drafting/Computer-Aided Manufacturing (CAD/CAM) using CAD/CAM software. The student develops drawings on the computer, adds tooling information, defines tool paths, generates Computer Numerical Control (CNC) code and uses the CNC code to operate the CNC machine tools. (CSU)

**MECH 052A Computer Numerical Control (CNC)** **Units 3**

*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce applications of computer numerical control programming for the areas of manufacturing, engineering, and machining. Topics covered include Cartesian coordinates, process planning, computer numerical control mathematics, tooling, speeds and feeds, and G and M Code programming for lathe and mill with emphasis on the lathe. (CSU)

**MECH 052B Computer Aided Drafting/Computer-Aided Manufacturing (CAD/CAM)** **Units 3**

*Prerequisites:* None.  
*Prerequisite Skills:* 1. Machine tool operation skills.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce topics in advanced computer numerical control programming for lathe and mill with emphasis on the mill. Computer Numerical Control (CNC) codes are generated by using Computer Aided Drafting/Computer Aided Manufacturing (CAD/CAM) software. (CSU)

**MECH 060 Metal Trade Layout and Forming Units 5***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach skills in basic layout and forming to better prepare the student for employment areas such as: machine shop, heating and air conditioning, fabrication and maintenance personnel in metal trade industries. (CSU)

**MECH 067A Elementary Machine Shop Units 4***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. Subjects include precision instruments, hand tools, layout and the operation of stationary power tools with an emphasis on the lathe. Elementary Machine Shop (MECH 67A and MECH 67B) is equivalent to Introductory Machine Shop (MECH 50A). The student who successfully completes MECH 67A and MECH 67B may not receive credit for MECH 50A. (CSU)

**MECH 067B Elementary Machine Shop Units 4***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. Subjects include precision instruments, hand tools, layout and the operation of machine tools with an emphasis on the lathe and milling machine. Elementary Machine Shop (MECH 67A and MECH 67B) is equivalent to Introductory Machine Shop (MECH 50A). The student who successfully completes MECH 67A and MECH 67B may not receive credit for MECH 50A. (CSU)

**MECH 067C Machine Shop Units 4***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide general machine tool theory, blueprint reading, and related mathematics for the manufacturing of machine parts. Subjects include advanced layout, uses of precision measuring instruments, and operation of drill presses, grinding machines, lathes, milling machines, and saws. Machine Shop (MECH 67C and MECH 67D) is equivalent to Beginning Machine Shop (MECH 50B). The student who successfully completes MECH 67C and MECH 67D may not receive credit for MECH 50B. (CSU)

**MECH 067D Machine Shop Units 4***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with theory and application of machine tool operations. Subjects include advanced lathe, milling machine, and related set-ups and tooling. (CSU)

**MECH 069V Internship: Machine Tool Technology Units 1-8***Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related in the machine tool technology internship. The student must enroll in a minimum of 7 units during the semester including internship units. For summer session, the student must enroll in one related course in addition to internship. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of internship program objectives and an employer internship agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the student participating in an occupational internship in machine tool technology. Application of discipline-related skills and knowledge of Secretaries Commission on Achieving Necessary Skills (SCANS) competencies is emphasized. Each student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college internship instructor. (CSU)

**MECH 075 Selected Topics: Mechanical Technology Units 0.5-4***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of mechanical technology not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**MECH 081A Refrigeration, Heating, and Air Conditioning Specialization Units 3***Prerequisites: MECH 31C.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to assist the advanced student in gaining a greater knowledge of a specialized area of the refrigeration, heating, and air trade. The work covered is developed between the student and the instructor at the beginning of the course.

**MECH 087A Machine Tool Technology Specialization Units 3***Prerequisites: None.**Prerequisite Skills: 1. Machine tool operation skills.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the advanced student in machine technology. The student completes an advanced specialized project developed in consultation with the instructor.

**MECH 087B Machine Tool Specialization Units 5***Prerequisites: None.**Prerequisite Skills: 1. Machine tool operation skills.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to assist the advanced student in gaining a greater knowledge of a specialized area of machine tool technology. Student objectives are developed between the student and the instructor at the beginning of the course.

**MECH 087C Air Conditioning, Refrigeration, and Heating Specialization Units 2-3**

*Prerequisites:* MECH 31C.

*Limitations on Enrollment:* This course requires instructor approval to enroll.

*Advisories:* None.

This course is designed for the advanced student in air conditioning, refrigeration, and heating (HVAC). The student completes an advanced specialized project developed in consultation with the instructor.

**MECH 088A Introductory Trade Welding Units 8**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the theory and application of metal joining and cutting processes in ferrous and nonferrous metals. Shielded metal arc welding (STICK) and oxy-acetylene cutting, welding and brazing processes are included.

**MECH 088B Beginning Trade Welding Units 8**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the theory and application of metal joining process, metal cutting and arc welding processes, and joining for ferrous and nonferrous metals and alloys. Manipulative skills in shielded metal arc welding processes are stressed. Emphasis is placed on individual student goals in his/her related skill area.

**MECH 088C Intermediate Trade Welding Units 8**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the theory and application of metal joining and cutting processes in ferrous and nonferrous metals. Manipulative skills in metal inert gas (MIG) welding are stressed.

**MECH 088D Advanced Trade Welding Units 8**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to the theory and application of metal joining and cutting processes in ferrous and nonferrous materials. Manipulative skills in tungsten inert gas (TIG) welding are stressed.

**MECH 089A Stick Welding Units 2**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an open entry/exit course designed for the student who wishes to acquire skills in the shielded metal arc welding (STICK) process.

**MECH 089B Metal Inert Gas (MIG) Welding Units 2**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to emphasize the application of the Gas Metal (MIG) Welding. The course includes theory and practical application of welding in a variety of positions on ferrous materials.

**MECH 089C Tungsten Inert Gas (TIG) Welding Units 2**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an open entry/exit course designed for the student who wishes to acquire skills in the tungsten inert gas (TIG) welding process.

## MECHANICAL TECHNOLOGY: APPRENTICESHIP

**A-MEC 067A Elementary Machine Shop Units 4**

*Prerequisites:* None.

*Limitations on Enrollment:* Indentured Apprentice.

*Advisories:* None.

This course is an introduction to machine tool theory, blueprint reading, and related mathematics with hands-on shop experience. Subjects include precision instruments, hand tools, layout and the operation of stationary power tools with an emphasis on the lathe. The student uses compute software to retrieve and plot project blueprints. (CSU)

**A-MEC 067B Elementary Machine Shop Units 4**

*Prerequisites:* None.

*Limitations on Enrollment:* Indentured apprentice.

*Advisories:* None.

This course is designed to apply machine tool theory, blueprint reading, and related mathematics to lab exercises. Subjects include precision instruments, hand tools, layout and the operation of lathes and portable power tools. The student uses computer software to retrieve and plot project blueprints. (CSU)

**A-MEC 067C Machine Shop Units 4**

*Prerequisites:* None.

*Limitations on Enrollment:* Indentured Apprentice.

*Advisories:* None.

This course is designed to provide general machine tool theory, blueprint reading, and related mathematics for the manufacturing of machine parts. Subjects include advanced layout, use of precision measuring instruments, operation of drill presses, grinding machines, lathes, vertical milling machines, and saws. The student uses compute software to retrieve and plot project blueprints. (CSU)

**A-MEC 067D Machine Shop Units 4**

*Prerequisites:* None.

*Limitations on Enrollment:* Indentured Apprentice.

*Advisories:* None.

This course is designed to provide the student with theory and application of advanced machine tool operations. Subjects include advanced lathe, vertical mill, horizontal mill, dividing head and rotary table applications. The student uses compute software to retrieve and plot project blueprints. (CSU)

**A-MEC 074A Basic Welding Units 2***Prerequisites: None.**Limitations on Enrollment: Indentured Apprentice.**Advisories: None.*

This course is designed to introduce basic welding skills. The course includes the basic theory, practice and application of arc welding and of oxy-acetylene cutting and welding.

**A-MEC 074B Machine Shop Units 2***Prerequisites: None.**Limitations on Enrollment: Indentured Apprentice.**Advisories: None.*

This course is designed to introduce fundamental machine shop practices. The course includes safety procedures, lathe operation, mill operation, drilling operations, and print reading.

**MUSIC****MUSIC 001 Music Fundamentals Units 3***Prerequisites: Reading level II.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student who wants a beginning background in the theory of music. No knowledge of music or music theory is assumed. The course includes: basic musical notation, rhythm and meter, major and minor scales, major and minor key signatures, intervals and inversions, triads (major, minor, diminished and augmented), some seventh chords, inversions of triads and seventh chords, elementary formal and harmonic analysis, and ear training for all of the above, plus some sight reading and melodic dictation. Some knowledge of keyboard will be included. This is NOT a music major course. (UC, CSU)

**MUSIC 002A Music History from Antiquity to 1750 Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a critical and analytical study of western historical sources, selected musical works, and composers of the period from antiquity through 1750. The student learns to compare and contrast musical genres of the medieval, renaissance, and baroque periods. (UC, CSU, CAN MUS 8)

**MUSIC 002B Music History from 1750 to the Present Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a critical and analytical study of western historical sources, selected musical works, and composers of the period from 1750 to the present. The student learns to compare and contrast musical genres of the classical, romantic, and contemporary periods. (UC, CSU)

**MUSIC 003A Introduction to Theory and Musicianship Units 4***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is the study of the intervals, major and minor triads, their connections and applications to simple diatonic melodies, the dominant seventh chord and its resolutions, the common chord modulations, ear training, interval recognition, and melodic and rhythmic dictation. (UC, CSU, CAN MUS 2, CAN MUS SEQ A with both MUSIC 3A and MUSIC 3B)

**MUSIC 003B Beginning Theory and Musicianship Units 4***Prerequisites: MUSIC 3A.**Limitations on Enrollment: None.**Advisories: None.*

This course is the study of a four-part writing in common practice style including primary and secondary triads and their inversions and resolutions. Included is simple chromatic sevenths and modulation to the near key. Keyboard and aural training is included. (UC, CSU, CAN MUS 4, CAN MUS SEQ A with both MUSIC 3A and MUSIC 3B)

**MUSIC 003C Intermediate Theory and Musicianship Units 4***Prerequisites: MUSIC 3B.**Limitations on Enrollment: None.**Advisories: None.*

This course is a theoretical and aural study of Bach two-part inventions, chromatic harmony and modulation, augmented sixth chords, Neapolitan sixth, chromatic sevenths, and enharmonic diminished seventh chords. Included is keyboard harmony with a minimum keyboard Bach invention and four-part harmony. (UC, CSU)

**MUSIC 003D Advanced Theory and Musicianship Units 4***Prerequisites: MUSIC 3C.**Limitations on Enrollment: None.**Advisories: None.*

This course is a theoretical and aural study of advanced chromatic theory, the fugue, impressionistic techniques, and early 20th century harmonic techniques. It also includes a study of the basic two- and three-part forms, the Rondo forms, and the Sonata Allegro from the classical period to the present. (UC, CSU)

**MUSIC 004 Exploring Music Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an exploration of growth and development of music from the 17th Century to the present. This course includes forms and styles used in Western art and surveys those factors influencing popular, rock, and commercial music as well as music used for live theater and in films. This is not a music major course. (UC, CSU)

**MUSIC 005 Selected Topics: Music Units 1-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to enable the College to offer instruction in one of the specialized areas of music not already covered by existing curriculum. (CSU)

**MUSIC 007 Excursions in Music of Our World Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a survey of non-western music. It addresses cultures that exhibit a minimum of western (European and American) influence from major geographic regions of the world including Australia, China, Japan, Indonesia, India, Turkey, the Arabic Middle East, eastern and western central Africa, South America, and native North America. (CSU)

**MUSIC 008 Exploring Jazz, Ragtime, and Blues** Units 3

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a survey of musical history and literature of jazz, ragtime, and blues in the United States. The course pursues an in-depth study of the genres, styles, and musical personalities involved in this unique American art form from the late nineteenth-century to the present. (UC, CSU)

**MUSIC 012A Class Voice** Units 1

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is the development of techniques for the solo voice. The principles of posture, breathing, diction, vocal anatomy, tone production, and presentation of one's self in public performances are stressed. Individual performance in class is a requirement. (UC, CSU)

**MUSIC 012B Class Voice** Units 1

*Prerequisites:* MUSIC 12A.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is the development of techniques for the solo voice. The principles of posture, breathing, diction, vocal anatomy, tone production, and presentation of one's self in public performances are stressed. Individual performance in class is a requirement. (UC, CSU)

**MUSIC 015 Delta Singers** Units 1

*Prerequisites:* None.  
*Corequisites:* Concurrent enrollment in MUSIC 17 or 17M.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed to develop the art of singing in the small choral ensemble. The choir consists of 20-30 members and includes the singing of choral masterworks from all historical periods for the chamber choir. Sight-reading and proper vocal technique are also stressed. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 015M Delta Singers** Units 1

*Prerequisites:* Completion of four semesters of MUSIC 15.  
*Corequisites:* Concurrent enrollment in MUSIC 17 or 17M; concurrent enrollment in MUSIC 40A or 40B or 40C or 40D.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed to develop the art of singing in the small choral ensemble. The choir consists of 20-30 members and includes the singing of choral masterworks from all historical periods for the chamber choir. Sight-reading and proper vocal techniques are also stressed. The student may receive credit in this course for a maximum of two semesters. (UC, CSU)

**MUSIC 017 Concert Choir** Units 1

*Prerequisites:* None.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed to develop the art of singing in the large choral ensemble. This ensemble stresses singing of choral masterworks for the large choir from all historical periods. Sight-reading and proper vocal technique are also stressed. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 017M Concert Choir** Units 1

*Prerequisites:* Completion of four semesters of MUSIC 17; concurrent enrollment in MUSIC 40A or 40B or 40C or 40D.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed to develop the art of singing in the large choral ensemble. This ensemble stresses the singing of choral masterworks for the large choir from all historical periods. Sight-reading and proper vocal technique are also stressed. The student may receive credit in this course for a maximum of two semesters. (UC, CSU)

**MUSIC 018 Delta Chorale** Units 1

*Prerequisites:* Qualified performer.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a choral ensemble for the community singer wishing to further knowledge of choral repertoire and vocal technique, and to enhance ensemble singing skills. The course stresses the study and performance of major works from the standard choral repertoire. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 020 Voice for Musical Theatre** Units 1

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is the study and development of vocal production techniques for the musical theatre performer. The principles of posture, breathing, diction, vocal anatomy, tone production, and presentation of one's self in public performances are stressed. Individual performance is a requirement of the class. (UC, CSU)

**MUSIC 026 Symphonic Band** Units 1-2

*Prerequisites:* None.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is dedicated to the rehearsal and performance of symphonic band literature with emphasis on sight-reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 026M Symphonic Band** Units 1-2

*Prerequisites:* Completion of four semesters of MUSIC 26; concurrent enrollment in MUSIC 40A or 40B or 40C or 40D.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is dedicated to the rehearsal and performance of symphonic band literature with emphasis on sight-reading and public performance. The student may receive credit in this course for a maximum of two semesters. (UC, CSU)

**MUSIC 027 Orchestra** Units 1-2

*Prerequisites:* Qualified performer.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is dedicated to the rehearsal and performance of orchestral literature with emphasis on sight reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 028 Concert Band** Units 1

*Prerequisites:* None.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is dedicated to the rehearsal and performance of concert band literature with emphasis on sight reading and public performance. The student may receive credit in this course for a maximum of four semesters. (CSU)

**MUSIC 029 Jazz Band Units 1-2***Prerequisites: None.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is dedicated to the rehearsal and performance of jazz band literature with emphasis on sight-reading and public performance. The course includes concentration on the techniques and styles of jazz, jazz-rock, and improvisation. The student may receive credit for this course for a maximum of four semesters. (UC, CSU)

**MUSIC 029M Jazz Band Units 1-2***Prerequisites: Completion of four semesters of MUSIC 29; concurrent enrollment in MUSIC 40A or 40B or 40C or 40D.**Limitations on Enrollment: None.**Advisories: Qualified performer.*

This course is dedicated to the rehearsal and performance of jazz band literature with emphasis on sight-reading and public performance. The course includes concentration on the techniques and styles of jazz, jazz-rock, and improvisation. The student may receive credit for this course for a maximum of two semesters. (UC, CSU)

**MUSIC 030A Class Guitar Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a first course in development of techniques for the guitar. There is an emphasis on building chord vocabulary sufficient to accompany wide vocal ranges and learning to read music. (UC, CSU)

**MUSIC 030B Class Guitar Units 1***Prerequisites: MUSIC 30A.**Limitations on Enrollment: None.**Advisories: None.*

This course is a second course in guitar. The course includes upper position chord routines, transposition, notation, solo playing, and essentials of the classic guitar. (UC, CSU)

**MUSIC 032 Studio Arts Ensemble Units 1***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student interested in the field of commercial music and entertainment. The ensemble consists of singer, backup instrumentalists, and technical crew who work together to study and perform selected musical arrangements. Opportunity for solo singing is frequent. The course stresses the study and performance of the unique American idioms of vocal jazz and songs of the American Musical Theater. The study of proper vocal technique, stage presence, and stage movement are also stressed. The student may receive credit for this course for a maximum of four semesters. (CSU)

**MUSIC 036A Class Piano Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student who wishes to play the piano for enjoyment and pleasure or who needs to use the instrument as a future elementary school teacher. (UC, CSU)

**MUSIC 036B Class Piano Units 1***Prerequisites: MUSIC 36A.**Limitations on Enrollment: None.**Advisories: None.*

This course is the continuation of study for the student who wish to continue to play the piano for enjoyment and pleasure or who needs to use the instrument as a future elementary school teacher. (UC, CSU)

**MUSIC 036C Class Piano Units 1***Prerequisites: MUSIC 36B.**Limitations on Enrollment: None.**Advisories: None.*

This course is the continuation of study for the student who wishes to play the piano for enjoyment and pleasure, or who needs to use the instrument as a future elementary classroom teacher. (UC, CSU)

**MUSIC 036D Class Piano Units 1***Prerequisites: MUSIC 36C.**Limitations on Enrollment: None.**Advisories: None.*

This course is the continuation of study for the student who wishes to play the piano for enjoyment and pleasure, or who needs to use the instrument as a future elementary classroom teacher. (UC, CSU)

**MUSIC 038 Class Piano for Music Majors Units 1***Prerequisites: MUSIC 3D, or concurrent enrollment in MUSIC 3A or 3B or 3C or 3D.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop basic keyboarding, sight-reading, improvisation, and performance skills for the student majoring in music. The course develops the skills necessary for satisfactory completion of the piano proficiency examinations. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 040A Applied Music Units 1***Prerequisites: Completion of MUSIC 3D; or concurrent enrollment in MUSIC 3A, or 3B, or 3C, or 3D.**Corequisites: Concurrent enrollment in MUSIC 15 or 15M or 17 or 17M or 26 or 26M or 27 or 27M or 29 or 29M.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is designed for individual, applied study of the student's principal performing medium and is an integral component for the developing musician. The course focuses on development of individual performance skills, as well as solo and orchestral repertoire for the first semester music major. The student completes a minimum of fifteen private lessons per semester and one hour of class instruction per week. (UC, CSU)

**MUSIC 040B Applied Music Units 1***Prerequisites: Completion of MUSIC 40A; completion of MUSIC 3D or concurrent enrollment in MUSIC 3A or 3B or 3C or 3D.**Corequisites: Concurrent enrollment in MUSIC 15 or 15M or 17 or 17M or 26 or 26M or 27 or 27M or 29 or 29M.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is designed for individual, applied study of the student's principal performing medium and is an integral component for the developing musician. The course focuses on development of individual performance skills, as well as solo and orchestral repertoire for the second semester music major. The student completes a minimum of fifteen private lessons per semester and one hour of class instruction per week. (UC, CSU)

**MUSIC 040C Applied Music Units 1**  
*Prerequisites:* Completion of MUSIC 40A; completion of MUSIC 3D or concurrent enrollment in MUSIC 3A or 3B or 3C or 3D.  
*Corequisites:* Concurrent enrollment in MUSIC 15 or 15M or 17 or 17M or 26 or 26M or 27 or 27M or 29 or 29M.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed for individual, applied study of the student's principal performing medium and is an integral component for the developing musician. The course focuses on development of individual performance skills, as well as solo and orchestral repertoire for the third semester music major. The student completes a minimum of fifteen private lessons per semester and one hour of class instruction per week. (UC, CSU)

**MUSIC 040D Applied Music Units 1**  
*Prerequisites:* Completion of MUSIC 40C; completion of MUSIC 3D or concurrent enrollment in MUSIC 3A, or 3B, or 3C, or 3D.  
*Corequisites:* Concurrent enrollment in MUSIC 15 or 15M or 17 or 17M or 26 or 26M or 27 or 27M or 29 or 29M.  
*Limitations on Enrollment:* Qualified performer.  
*Advisories:* None.

This course is designed for individual, applied study of the student's principal performing medium and is an integral component for the developing musician. The course focuses on development of individual performance skills, as well as solo and orchestral repertoire for the fourth semester music major. The student completes a minimum of fifteen private lessons per semester and one hour of class instruction per week. Students may receive credit in this course for a maximum of three semesters. (UC, CSU)

**MUSIC 042 Audio Recording Techniques Units 3**  
*Prerequisites:* None.  
*Prerequisite Skills:* 1. Basic computer literacy. 2. Knowledge of music fundamentals..  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* MUSIC-001.

This course is an introduction to the principles and practices of studio recording. Topics covered include: acoustics and the physical properties of sound, basic recording techniques, studio protocol, mixing consoles, microphone selection and placement, multi-track recording, audio processing, mixing, and current industry production values. (CSU)

**MUSIC 043A Digital Audio Workstations Units 3**  
*Prerequisites:* MUSIC-041 Introduction to Media Arts, Music and Recording Technology each with a grade of "C" or better.  
*Prerequisite Skills:* 1. Advanced computer literacy. 2. Knowledge of music fundamentals..  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a study of the production of audio and music utilizing a computer based production environment. Topics will include data entry, recording live sound, editing, plug-ins, mastering, and mixing for compact disc, picture, and radio. (CSU)

**MUSIC 043B Advanced Digital Audio Workstation Units 3**  
*Prerequisites:* MUSIC-043A Digital Audio Workstations each with a grade of "C" or better and.  
*Prerequisite Skills:* 1. Advanced computer literacy. 2. Knowledge of music fundamentals..  
*Corequisites:* None.

*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is the advanced production of audio, music, and sound utilizing a computer based Musical Instrument Digital Interface (MIDI)/Digital Audio Workstation (DAW) production environment. Topics will include recording live sound, editing, plug-ins, surround sound, mastering, data compression, and authoring content for compact disc, DVD, broadcast, video gaming, and Internet. (CSU)

**MUSIC 050H Special Studies: Music Units 1-2**  
*Prerequisites:* Completion of survey course with grade of "B" or better and presentation of a project acceptable to the instructor and division chairperson.  
*Limitations on Enrollment:* None.

*Advisories:* None.

This course is open to all the student qualified to do advanced work in the field. The course includes research, directed reading, field work or other advanced study, and the course may be repeated for a maximum total of four units. (UC, CSU)

**MUSIC 051 Woodwind Ensemble Units 1**

*Prerequisites:* None.

*Limitations on Enrollment:* Qualified performer.

*Advisories:* None.

This course is dedicated to the rehearsal and performance of woodwind literature for various combinations of chamber ensembles such as duets, trios, and quartets. The course includes sight-reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 052 Brass Ensemble Units 1**

*Prerequisites:* None.

*Limitations on Enrollment:* Qualified performer.

*Advisories:* None.

This course is dedicated to the rehearsal and performance of brass literature for various combinations of chamber ensembles such as duets, trios, and quartets. The course includes sight-reading and public performance. The student may receive credit for this course for a maximum of four semesters. (UC, CSU)

**MUSIC 053 Percussion Ensemble Units 1**

*Prerequisites:* None.

*Limitations on Enrollment:* Qualified performer.

*Advisories:* None.

This course is dedicated to the rehearsal and performance of percussion literature for various combinations of chamber ensembles such as duets, trios, and quartets. The course includes sight-reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 057 Guitar Ensemble Units 1**

*Prerequisites:* None.

*Limitations on Enrollment:* Qualified performer.

*Advisories:* None.

This course is dedicated to the rehearsal and performance of guitar literature for various combinations such as duets, trios, and quartets. The course includes sight reading and public performance. (UC, CSU)

**MUSIC 058 String Ensemble Units 1***Prerequisites: None.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is dedicated to the rehearsal and performance of string literature for various combinations of chamber ensembles such as duets, trios, and quartets. The course includes sight-reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 061 Studio Band Units 1***Prerequisites: None.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is dedicated to the rehearsal and performance of commercial band literature with emphasis on sight reading and public performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 063 Jazz Improvisation Units 1***Prerequisites: None.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is dedicated to the theory and practice of the fundamentals of jazz improvisation. The course will include development of performance skills, musicianship, jazz styles, and musical creativity. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 064 Jazz Combo Units 1***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is dedicated to rehearsal and performance of literature for small jazz combo. Included in the jazz combo are piano, bass, and drums as well as various other solo instruments. Emphasis includes improvisation, sight-reading, and performance. The student may receive credit in this course for a maximum of four semesters. (UC, CSU)

**MUSIC 080 Selected Topics: Music Units 0.5-3***Prerequisites: None; exempt from assessment testing.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of music not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**MUSIC 101 Piano for Older Adult Units 0***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the students an opportunity to work with the piano. Emphasis will be working as an individual as well as in ensemble settings.

**MUSIC 102 Creative Seniors: Music Units 0***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the students an opportunity to work with a number of studio instruments. Emphasis work as an individual as well as in ensemble settings.

**MUSIC 104 Meet the Maestro: Exploring Musical Literature for Seniors Units 0***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to allow students to explore musical literature. The course includes discussion and demonstration of genres and styles from various periods of musical composition. The focus of the course is on the development of listening techniques and skills of aural analysis through participation in lectures and attendance at musical performances.

**MUSIC 115 Delta Singers for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop the art of singing in the small choral ensemble. The choir will consist of 20-30 members and includes the singing of choral masterworks from all historical periods for the chamber choir. Sight-reading and proper vocal techniques are also be stressed.

**MUSIC 117 Concert Choir for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop the art of singing in the large choral ensemble. This ensemble stresses the singing of choral masterworks for the large choir from all historical periods. Sight-reading and proper vocal technique are be stressed.

**MUSIC 118 Delta Chorale for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is a choral ensemble for the community singer wishing to further knowledge of choral repertoire and vocal technique, and to enhance ensemble singing skills. The Delta Chorale stresses the study and performance of major works from the standard choral repertoire. Previous choral experience is recommended.

**MUSIC 126 Symphonic Band for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is dedicated to the rehearsal and performance of symphonic band literature with emphasis on sight reading and public performance.

**MUSIC 127 Orchestra for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is dedicated to the rehearsal and performance of orchestral literature with emphasis on sight reading and public performance.

**MUSIC 128 Concert Band for Seniors Units 0***Prerequisites: None.**Limitations on Enrollment: Qualified Performer.**Advisories: None.*

This course is dedicated to the rehearsal and performance of concert band literature with emphasis on sight reading and public performance.

**MUSIC 129 Jazz Band for Seniors Units 0***Prerequisites: Qualified performer.**Limitations on Enrollment: None.**Advisories: None.*

This course is dedicated to the rehearsal and performance of jazz band literature with emphasis on sight reading and public performance. The course includes concentration on the techniques and styles of jazz, jazz-rock, and improvisation.

**MUSIC 161 Studio Band for Seniors Units 0***Prerequisites: None.**Limitations on Enrollment: Qualified performer.**Advisories: None.*

This course is dedicated to the rehearsal and performance of commercial band literature with emphasis on sight reading and public performance.

## NATURAL RESOURCES

**N R 002 Conservation of Natural Resources Units 3***Prerequisites: Reading level II.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to examine the need, importance, and philosophy of conservation of natural resources in our contemporary world. Human dependency on resources and an understanding of ecological principles and natural systems are emphasized. Topics include natural resource classification; history, importance, and methods of conservation; resource management issues; citizens' roles in conservation; and prospects for the future. Current environmental issues are discussed from local, national, and global perspectives. The course is designed to increase student's awareness of the importance of conservation of natural resources as a social and behavioral science and to increase student's participation in natural resource conservation. (UC, CSU)

## NURSING

**NURS 001 Introduction to Nursing Units 4.5***Prerequisites: ANAT 2 or ANAT 1 and PHYSI 1, MICRO 2, FCS 6, ENG 1A; concurrent enrollment in NURS 3.**Limitations on Enrollment: Admission into the Associate Degree Nursing Program.**Advisories: None.*

This course is designed to present the concepts and principles of nursing practice. Development and practical application of the concepts of wholism with emphasis upon the biological, psychological, sociological, cultural, and spiritual needs of the individual client as a member of the community and society is integrated throughout the course. The nursing process is introduced as a method to be used in the planning and evaluation of nursing care for adult and/or geriatric clients. The ethical and legal aspects of professional nursing, trends in nursing, and the basic pharmacological considerations inherent in providing nursing are discussed. The principles of patient teaching and the documentation of patient care are introduced. Clinical experiences focus upon the actual and potential problems of the adult with chronic and/or non-critical illness. The student learns to meet basic human needs of selected individuals in the Skills Laboratory, extended care, acute care, and community health settings. (CSU)

**NURS 002 Introduction to Medical/Surgical Nursing Units 4.5***Prerequisites: NURS 1 with a grade of "C" or better and concurrent enrollment in NURS 3.**Limitations on Enrollment: Admission into the Associate Degree Nursing Program.**Advisories: None.*

This course is designed to introduce the concepts and principles of Medical-Surgical Nursing. The concepts of wholistic care are considered as the basis of providing nursing care to the adult in varying stages of the life cycle. Placement on the health-illness continuum is assessed in terms of cardiovascular, gastrointestinal, and pharmacological considerations. The role of the professional nurse in planning and providing nursing care by utilizing the nursing process is reinforced. Legal and ethical factors inherent in nursing care are introduced. Clinical experiences focus on the normal changes that occur during the aging process, actual and potential problems associated with chronic and/or non-critical illness, pain management, and oncology. The student learns to assess the health status of the individual and provide care to selected adults in acute, long-term, and community health care settings. (CSU)

**NURS 003 Administration of Medication Units 3***Prerequisites: BIOL 33, or BIOL 31 and BIOL 32, BIOL 22, FCS 6, ENG 1A.**Limitations on Enrollment: Admission into the Associate Degree Nursing Program.**Advisories: None.*

This course is designed to present guidelines for current medication administration practices for the individual throughout the health-illness continuum. The course utilizes the nursing process to present a wholistic approach to medication-related patient care and teaching through the adult years of the life cycle. Ethical and legal aspects of medication administration in the community and society are included. The role of the nurse in drug dosage calculation is emphasized. (CSU)

**NURS 004 Beginning Medical/Surgical Nursing Units 5.5***Prerequisites: NURS 2 and NURS 3 or H S 3 with a grade of "C" or better.**Limitations on Enrollment: Admission into the Associate Degree Nursing Program.**Advisories: None.*

This course is designed to provide learning experiences directed toward restoration and maintenance of optimal health of the adult in the acute and non-traditional health care setting within a culturally diverse community. The concept of wholism, integrated into the nursing process, is utilized as a means to facilitate interventions in adults experiencing chronic and acute health problems. The theoretical content includes immunology and hematology, ethical-legal aspects of medication administration, and concepts pertinent to the neurological, genitourinary, respiratory, endocrine, and musculoskeletal systems. The expanded role of the nurse as a collaborative member of the health care team is emphasized. (CSU)

**NURS 005 Mental Health Nursing Units 4**

*Prerequisites:* NURS 2 and NURS 3 or H S 3 with a grade of "C" or better.

*Limitations on Enrollment:* Admission into the Associate Degree Nursing Program.

*Advisories:* None.

This course is designed to present mental health principles to assist the nursing student in developing an increased understanding of human behavior, therapeutic communication, anxiety, psychiatric disorders, psychopharmacology, chemical dependency, personality disorders, domestic violence, sexual assault, and mental status assessment. With emphasis on a wholistic, collaborative model, clinical experiences are offered in private, public and community psychiatric agencies where psychiatric care is provided to a culturally diverse population. (CSU)

**NURS 006 Nursing The Childrearing Family Units 4**

*Prerequisites:* NURS 4 and NURS 5 with a grade of "C" or better.

*Limitations on Enrollment:* Admission into the Associate Degree Nursing Program.

*Advisories:* None.

This course is designed to utilize the theme of wholism and the nursing process in the study of well and ill children from the neonatal to adolescent periods. Care of the childrearing family in health, acute and chronic illness, and in grief is discussed. The role of the pediatric nurse in acute and structured settings, principles of growth and development, and ethical-legal issues are integrated in the course content. (CSU)

**NURS 007 Intermediate Medical/Surgical Nursing Units 5.5**

*Prerequisites:* NURS 4 and NURS 5 with a grade of "C" or better.

*Limitations on Enrollment:* Admission into the Associate Degree Nursing Program.

*Advisories:* None.

This course is designed to introduce the student to the expanded role of emergency and critical care nursing. Theoretical and clinical approaches to nursing care of the severely compromised individual through the resuscitative, critical, and restorative phases of acute illness are presented. Analysis of the etiology and effect of biological, psychological, spiritual, and cultural influences of acute injury to the core organs of the neurological, cardiovascular, and respiratory systems is utilized in the priority and delivery of comprehensive nursing care. The collaborative role of the nurse in preventive care and maintenance of optimal wellness is discussed. (CSU)

**NURS 008 Nursing of The Childbearing Family Units 4**

*Prerequisites:* NURS 6 and NURS 7 with a grade of "C" or better.

*Limitations on Enrollment:* Admission into the Associate Degree Nursing Program.

*Advisories:* None.

This course is designed to focus on the integration of wholistic concepts and principles from social, behavioral, and biological sciences to prepare students to provide nursing care for childbearing families in acute and home/community settings. Application of the nursing process in theoretical and clinical situations is utilized to promote and maintain wellness for antepartal, intrapartal, postpartal, neonatal, and intraconceptual families. Emphasis is placed upon the role of the nurse as a health educator. Current ethical-legal and health care issues are integrated in the course content. (CSU)

**NURS 009 Advanced Medical/Surgical Nursing Units 3.5**

*Prerequisites:* NURS 6 and NURS 7 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the program.

*Advisories:* None.

This course is designed to provide theoretical and clinical ap-

proaches in providing nursing care to individuals of varying ages with complex health care needs in an acute care environment. Concepts related to organization, patient care management, and leadership are included with the use of the nursing process. Emphasis is placed on patient care outcomes and professional accountability and responsibility. Professional issues, trends, and roles are also presented. (CSU)

**NURS 010 Community-Based Nursing Units 2**

*Prerequisites:* NURS 6 and NURS 7 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the program.

*Advisories:* None.

This course is designed to provide theoretical and clinical approaches in providing nursing care to individuals of varying ages, with complex health care needs. Nursing care is provided in the community, in clients homes, where they work, and where they play. Critical thinking skills are emphasized and outcomes are measured using the Nursing Process. (CSU)

**NURS 011 Selected Topics: Acute Nursing Care Units 3**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to assist licensed nursing personnel to update themselves in the care of acutely ill patients. Topics include such areas as cardiovascular, renal, respiratory, neurological, orthopedic, burns, oncology, pediatrics, and geriatrics. The course may be repeated for credit each five years. (CSU)

**NURS 012 Mobile Intensive Care Nursing Units 5**

*Prerequisites:* RN with valid license; 1 year of experience or currently working in an emergency room or critical care unit; current CPR or ACLS; successful completion of H S 34A; basic EKG interpretation.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide didactic instruction and field training in the performance and supervision of pre-hospital advanced emergency care. The course meets requirements recommended by the State of California for mobile intensive care nurses. (CSU)

**NURS 015 Critical Care Nursing Units 10**

*Prerequisites:* NURS 25 or 38.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a critical care course designed to assist the licensed nurse in acquiring current knowledge and skills necessary in the care of the critically ill. (CSU)

**NURS 050 Independent Study: Nursing Issues Units 1-6**

*Prerequisites:* NURS-001 Fundamentals of Nursing each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Instructor Permission.

*Advisories:* None.

This course is designed to provide the selected student opportunities to further his or her knowledge and skills in specified areas. Theory and laboratory hours are arranged on an individual basis. (CSU)

**NURS 093V Work Experience: Nursing Units 1-4**

*Prerequisites: None.*

*Prerequisite Skills: 1. The student must meet the entry skills appropriate for their nursing program and successfully complete that class in order to receive credit for work experience.*

*Corequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to give the student college credit for on-the-job experience when correlated with a course relating to that job. The work experience course for students enrolled in the Associate Degree Nursing program will provide an opportunity for students to participate in relevant work experiences in health care facilities utilizing skills in which competency has been met in prior nursing courses. All students must demonstrate new and expanded learning experiences before being permitted to repeat work experience. The course may be repeated for a maximum total of sixteen units.

**NURS 101 Review of Fundamentals of Nursing Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to assist the student in reviewing the basic knowledge, skills, and understanding involved in giving total patient care.

**NURS 103 Review of Beginning Medical-Surgical Nursing Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to assist the student in reviewing the theory of advanced medical-surgical nursing. Emphasis is placed on correlation of past learning.

**NURS 104 Review of Nursing the Childbearing Family Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to assist students in reviewing the nursing needs during the normal maternity cycle which includes antepartum, intrapartum, and postpartum periods, and neonate care.

**NURS 105 Review of Childrearing Family: Pediatrics Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is a lecture course designed to assist the student in reviewing normal growth and development, influences on normal growth and development, and aberrations from the norm.

**NURS 106 Review of Mental Health Nursing (Psychiatric) Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is a lecture course designed to assist the student in studying psychiatric principles as applied in all nursing, and an increased understanding of human behavior.

# ORNAMENTAL HORTICULTURE

**\*See also Horticultural**

**O H 075 Selected Topics: Ornamental Horticulture Units 0.5-3**

*Prerequisites: None; exempt from assessment testing.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of ornamental horticulture not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**O H 096V Work Experience: Ornamental Horticulture Units 1-8**

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the ornamental horticulture work experience.*

*The student must enroll in a minimum of 7 units during the semester including work experience units. For summer session, the student must enroll in one related course in addition to work experience. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of work experience program objectives and an employer work experience agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the student employed in the area of ornamental horticulture. The course objectives are developed by the student in consultation with his or her supervisor. The student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college work experience instructor. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140.

# PHILOSOPHY

**PHILO 006 Introduction to Philosophy Units 3**

*Prerequisites: Reading level II.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is a survey of issues in philosophy. Competing positions in the fields of metaphysics, epistemology, ethics, and the history of philosophy are presented, discussed, and critically evaluated. Particular areas of inquiry include, but are not limited to: What is philosophy? How should one live? Is knowledge possible? Is there a God? Why evil? (UC, CSU, CAN PHIL 2)

**PHILO 030 Introductory Logic Units 3**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce methods for recognizing, constructing, and evaluating arguments. The concepts of induction, deduction, validity, soundness, strength, and cogency are explored in detail. There is a survey of informal fallacies as well as an introduction to the methodology associated with symbolic logic, natural deduction, and the calculation of probabilities. (UC, CSU, CAN PHIL 6)

**PHILO 040 Ethics Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a survey of ethical theories and contemporary ethical issues to which the various theories are applied. The theories introduced are ethical relativism, egoism, utilitarianism, Kantian deontology, natural law theory, and feminist ethical theory. Issues discussed are euthanasia, abortion, legal punishment, animal rights, equality and discrimination, and economic justice. (UC, CSU, CAN PHIL 4)

**PHILO 045 God and the Person Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a survey of issues and questions concerning the existence and nature of God, the validity of religious experience, the nature of relationships between persons and God, and the relationship between faith and reason. (UC, CSU)

**PHILO 050 Asian Philosophy Units 3***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the philosophical tradition of Asia. Special emphasis is placed on the Buddhist, Hindu, Taoist, and Confucian philosophies. (UC, CSU)

**PHILO 050H Special Studies: Philosophy Units 1-2***Prerequisites: Presentation of a project acceptable to the instructor and the division chairperson; PHILO 6, 35, or 40 with grade of "B" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to allow the student qualified to do advanced work in the field. The course includes research, directed reading, field work, or other advanced study. The course may be repeated for a maximum total of 4 units. (CSU)

**PHILO 075 Selected Topics: Philosophy Units 0.5-3***Prerequisites: None; exempt from assessment testing.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of philosophy not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## PHOTOGRAPHY

**PHOTO 001A Introduction to Photography Units 3***Prerequisites: None.**Prerequisite Skills: 1. Reading level II.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introductory course in traditional photographic camera work and laboratory procedures. Basic camera theory, darkroom procedures, aesthetics, history, and concepts are presented in lecture and practiced in laboratory periods. (UC, CSU, CAN ART 18)

**PHOTO 001B Intermediate Photography Units 3***Prerequisites: PHOTO-001A Introduction to Photography each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a black and white photography course designed to offer intermediate technique for both small and/or medium format camera work. The course also includes large format camera work in conjunction with intermediate level exposure-development control. (UC, CSU)

**PHOTO 001C Advanced Photography Units 3***Prerequisites: PHOTO 1B with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is a rigorous work of the large format view camera through theory and practice of the Zone Systems exposure-development relationships. Negative and print control are emphasized for exceptional control in the medium. Advanced aesthetics, techniques, and concepts expand student awareness of the dynamics of photography. The history of large format concepts in artistic and utilitarian usage is explored. (CSU)

**PHOTO 006A Beginning Color Photography Units 3***Prerequisites: PHOTO 1A with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student color negative and print laboratory work with emphasis on both technical and aesthetic aspects of the photography medium. (CSU)

**PHOTO 015 Selected Topics: Photography Units 1-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one of the specialized areas of photography not already covered by existing curricula. (CSU)

**PHOTO 034 Workshop Projects Units 2***Prerequisites: PHOTO-001B Intermediate Photography each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an independent study in photography to meet individual student needs. (CSU)

**PHOTO 050H Special Studies: Photography Units 1-2***Prerequisites: PHOTO 1B and PHOTO 34 both with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is open to the student who wishes to pursue a research problem through individual laboratory work and associated studies. The proposed project must be acceptable to a member of the photography staff and approved by the division chairperson. The course may be repeated for a maximum of 4 units. (CSU)

**PHOTO 075 Selected Topics: Photography Units 1-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one of the specialized areas of photography not already covered by existing curriculum. The course may be repeated for a maximum of 4 units.

**PHOTO 080 Selected Topics: Photography Units 0.5-3**

*Prerequisites:* None; exempt from assessment testing.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of photography not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**PHOTO 101 Photography for the Older Adult**

*Prerequisites:* None.

*Prerequisite Skills:* 1. Basic darkroom skills.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is photographic camera work and laboratory procedures for the older adult. Basic camera theory, darkroom procedures, aesthetics, history, and related concepts are presented in lecture and practiced in laboratory periods.

## PHYSICAL EDUCATION & RECREATION

**P E 001A Beginning Swimming Units 1-1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a beginning course for the non-swimmer. (CSU)

**P E 001B Intermediate Swimming Units 1-1.5**

*Prerequisites:* PE 1A.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to emphasize the development of crawl, back, breast, and side strokes. (CSU)

**P E 001D Beginning Swim for Health Units 1.5-2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to help the beginning swimmer conditioning to improve cardiovascular endurance through swimming and to teach sound individual conditioning techniques. Each student is pre-tested in various health and fitness components. (CSU)

**P E 001E Intermediate Swim for Health Units 1-1.5**

*Prerequisites:* PE 1D.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to help the intermediate swimmer improve cardiovascular endurance through swimming and to teach sound individual conditioning techniques. Each student is pre-tested in various health and fitness components. (CSU)

**P E 001F Advanced Swim for Health Units 1-1.5**

*Prerequisites:* PE 1E.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to help the advanced swimmer improve cardiovascular endurance through swimming and to teach sound individual conditioning techniques. Each student is pre-tested and post-tested in various health and fitness components. (UC, CSU)

**P E 001G Beginning Water Fitness Units 2**

*Prerequisites:* None.

*Prerequisite Skills:* 1. The student must be able to swim one width of the pool without assistance and without touching the bottom. Any stroke is acceptable, and the head may be out of the water..

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introductory exercise class executed primarily in deep water. The course emphasizes muscular strength and endurance, cardiovascular endurance, and flexibility. Swimming skills are not required, but it is necessary to feel comfortable in deep water. Flotation belts will be provided. (UC, CSU)

**P E 001H Intermediate Water Fitness Units 1.5**

*Prerequisites:* None.

*Prerequisite Skills:* 1. The student is able to swim one width of the pool without assistance and without touching the bottom. Any stroke is acceptable, and the head may be out of the water..

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* P E-001G each with a grade of "C" or better.

This course is an intermediate exercise class executed in both shallow and deep water. This course builds on muscular strength and endurance, cardiovascular endurance, and flexibility established in the introductory level course. (UC, CSU)

**P E 001I Advanced Water Fitness Units 1.5**

*Prerequisites:* None.

*Prerequisite Skills:* 1. The student is able to swim unassisted one width of the pool, without touching bottom. Any stroke is acceptable, and the head may be out the water..

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an advanced level course which builds on previous experience in water exercise. The course emphasizes student's ability to individually progress movement intensity to improve fitness. Course includes muscular strength development, endurance, cardiovascular endurance development, and flexibility exercises. (UC, CSU)

**P E 002 Lifeguard Training Units 2**

*Prerequisites:* Refer to the Catalog Statement for additional corequisites.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the individual with knowledge and skill to save ones own life or the life of another in the event of a water emergency. The student must be at least 15 years old; swim 500 yards continuously using each of the following strokes for at least 50 yards each: crawl, breaststroke, elementary backstroke, sidestroke; surface diving to a minimum depth of 9 feet and bring a 10-pound diving brick to the surface; surface dive to a minimum depth of 5 feet and swim under the water for a minimum of 15 yards; tread water for one minute; possess before or during the course the American Red Cross Standard First Aid/ American Red Cross Community First Aid Certificate and either the American Red Cross or American Heart Association Adult Cardio-Pulmonary Resuscitation Certificate. The American Red Cross Certificate for lifeguard is awarded to those who successfully complete the course. This course may be repeated for credit once every three years. (UC, CSU)

**P E 004A Springboard Diving Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the student to the fundamentals of springboard diving including the hurdle and required dives in the five diving categories on the one meter diving board. The student learns stretching and conditioning techniques to strengthen and enhance abilities in springboard diving. (CSU)

**P E 004B Springboard Diving Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to allow students to practice the fundamentals of springboard diving including the hurdle and required optional dives in the five diving categories on the one and three meter diving boards. Students learn stretching and conditioning techniques to strengthen and enhance their abilities in springboard diving. (CSU)

**P E 004C Springboard Diving Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to allow the student to practice the fundamentals of springboard diving, including the hurdle and required optional dives in the five diving categories on the one and three meter diving boards. The student learns stretching and conditioning techniques to strengthen and enhance abilities in springboard diving. (CSU)

**P E 006 Wrestling Units 0.5-1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with offensive and defensive wrestling fundamentals and match tactics. Conditioning, strength, and cardiovascular conditioning are emphasized to enable participants to handle the strains of wrestling. Rules of the sport are covered. (CSU)

**P E 009A Individual Conditioning I Units 1.5-2***Prerequisites: None.*

*Prerequisite Skills: 1. Each student will submit a physical activity readiness questionnaire and will be cleared to participate in the class if the assessment indicates that the student does not have any physical limitations that would preclude them from doing vigorous physical activity.*

*Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to improve the individual's physical fitness level through the use of physical fitness testing, aerobic exercise, resistive exercise training, and flexibility activities. Included are lectures designed to enhance the student's life-long approach and understanding of exercise and its effect on the body. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009B Individual Conditioning II Units 1-1.5***Prerequisites: P E-009A Beginning Individual Conditioning each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to build upon the information learned in beginning individual conditioning. The student will continue the development of a life-long commitment to exercise. The course includes physical fitness testing, aerobic exercise, resistive exercise training, and flexibility activities. More extensive lectures on cardiovascular health, nutrition, and elements of exercise are included to enhance previous knowledge. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009C Individual Conditioning III Units 1-1.5***Prerequisites: P E-009B Intermediate Individual Conditioning each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to take the information learned in beginning individual conditioning and develop a life-long commitment to exercise. The course includes physical fitness testing, resistive exercise training, and flexibility activities. The overall experience culminates in students formulating an individualized program to meet their unique needs. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009D Beginning Jazz Aerobics Units 1.5-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to a complete work-out done to music. The course includes stretching, body training, and cardiovascular work. The course content is based on a knowledge of training and conditioning techniques, heart disease and exercise, muscle physiology, and nutrition. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009E Intermediate Jazz Aerobics Units 1-1.5***Prerequisites: PE 9D.**Limitations on Enrollment: None.**Advisories: None.*

This course is a continuation of a complete work-out including stretching, body training, and cardiovascular work. The student develops life-long diet plans and learns to develop relaxation techniques to combat stress. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009F Advanced Jazz Aerobics Units 1-1.5***Prerequisites: PE 9E.**Limitations on Enrollment: None.**Advisories: None.*

This course is one that includes stretching, body training, and cardiovascular work. The course content is based on a knowledge of training and conditioning techniques, heart disease and exercise, muscle physiology, and nutrition. The student learns to apply these principles to other advanced fitness activities. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009H Beginning Sports Conditioning Units 1.5-2***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to expose the student to the various components of sport-related conditioning. The student develops a theoretical knowledge of these components and participate in activities that include jogging, running, plyometrics, as well as strength and flexibility training. This course is designed for the athlete or the student wishing to participate in a vigorous training program. (CSU/UC)

**P E 009I Intermediate Sports Conditioning Units 1-1.5***Prerequisites: PE 9H.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to take the various components of sport-related conditioning and expand upon them. Measurements of strength, endurance, and agility are included. Special emphasis is placed upon the learning of the concepts and theories of a good sports conditioning program. (CSU)

**P E 009J Advanced Sports Conditioning Units 1-1.5***Prerequisites: PE 9I.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to take the information learned in the previous two courses and develop a life-long commitment to exercise and participation in competitive or recreational sport activities. The overall experience culminates with the student being able to formulate an individual conditioning program which enhances his or her ability to participate in a competitive or recreational sport. (CSU)

**P E 009K Beginning Power Aerobics Units 1.5-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop cardiovascular fitness, strength training, and flexibility through the use of aerobic exercise and weight training. The course incorporates low and high impact aerobics and body toning through the use of weights and diet development. The course focuses on the physical development techniques for both men and women. All exercises are performed to music. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009L Intermediate Power Aerobics Units 1-1.5***Prerequisites: PE 9K.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop cardiovascular fitness, strength training, and flexibility through the use of aerobic exercise and weight training. The course incorporates low and high impact aerobics and body toning through the use of weights and diet development. The course focuses on the physical development techniques for both men and women. All exercises are performed to music. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 009M Advanced Power Aerobics Units 1-1.5***Prerequisites: PE 9I.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop cardiovascular fitness, strength training, and flexibility through the use of aerobic exercise and weight training. The course incorporates low and high impact aerobics and body toning through the use of weights and diet development. The course focuses on the physical development techniques for both men and women. All exercises are performed to music. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 010A Beginning Fitness Walking Units 1.5***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with physical and cardiovascular training. Emphasis is placed on stretching and attaining each individual's target heart rate. (UC, CSU)

**P E 010B Intermediate Fitness Walking Units 1.5***Prerequisites: P E-010A Beginning Fitness Walking each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to promote physical well-being through stress reduction, weight control, and walking. Attention is given to increasing cardiovascular efficiency, muscular strength, and endurance. (UC, CSU)

**P E 010C Advanced Fitness Walking Units 1.5***Prerequisites: P E-010B Intermediate Fitness Walking each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to promote lifelong physical and cardiovascular benefits to the student. Emphasis is focused on increasing cardiovascular efficiency, muscular strength, and endurance. (UC, CSU)

**P E 014A Weight Training I Units 2-2.5***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the student experience in the six basic levels of lifts. The student is exposed to an individual weight training program. Prevention and rehabilitation of injuries are stressed. Each student is pre-tested and post-tested in various health and fitness components.(CSU)

**P E 014B Weight Training II** **Units 1.5-2**  
*Prerequisites:* P E-014A Beginning Weight Training each with a grade of "C" or better.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to give the student experience in intermediate level of lifts. The student develops an individual weight training program. Prevention and rehabilitation of injuries is stressed. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 014C Weight Training III** **Units 1.5-2**  
*Prerequisites:* P E-014B Intermediate Weight Training each with a grade of "C" or better.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to give the student experience in the advanced levels of lifts. The student completes an individual weight training program. Prevention and rehabilitation of injuries are stressed. Each student is pre-tested and post-tested in various health and fitness components. (CSU)

**P E 015 Selected Topics: Physical Education Units 1-2**  
*Prerequisites:* Reading level II or concurrent enrollment in reading.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to offer instruction in one of the specialized areas of physical education not already covered by existing curricula. (CSU)

**P E 016A Beginning Modern Dance** **Units 1-1.5**  
*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to condition the student and study the use of the body in rhythmic motion in some of the less complicated dances. Fundamental techniques are emphasized. Lectures and discussions are included. (UC, CSU)

**P E 016B Intermediate Modern Dance** **Units 1-1.5**  
*Prerequisites:* PE 16A.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is the study of intermediate dance technique and patterns. Creative dances are practiced with the express purpose of establishing individual and group dances for public performances. Lectures and discussions are included. (UC, CSU)

**P E 016C Advanced Modern Dance** **Units 1-1.5**  
*Prerequisites:* P E 16B.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is the study of advanced techniques, styles, and rhythms used in creative dances which are practiced with the express purposes of establishing solo, individual, and group dances for public performances. Lectures and discussions are included. (UC, CSU)

**P E 021A Beginning Fencing** **Units 1-1.5**  
*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to develop basic skills and techniques of fencing with the three combative weapons of foil, epee, and sabre. The course covers developmental exercise along with skills and techniques utilized in formal competition. The drama or dance student finds it valuable for mental and body discipline on the stage. (UC, CSU)

**P E 021B Intermediate Fencing** **Units 1-1.5**  
*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to develop the intermediate skills and techniques of fencing with the three combative weapons of foil, epee, and sabre. The course covers developmental exercises with skills and techniques in formal competition. The drama or dance student finds it valuable for mental and body discipline on the stage. (UC, CSU)

**P E 021C Advanced Fencing** **Units 1-1.5**  
*Prerequisites:* PE 21B.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is designed to develop the advanced skills and techniques of fencing with the three combative weapons of foil, epee, and sabre. The course covers developmental exercises with skills and techniques in formal competition. The drama or dance student finds it valuable for mental and body discipline on the stage. (UC, CSU)

**P E 022 Tennis Units 1-1.5**  
*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is an introduction to the rules, etiquette, fundamentals, and strategy of tennis. Physical conditioning, agility and the carry-over value of the activity are stressed. This class can be repeated for a maximum of 6 units.(UC, CSU)

**P E 022A Beginning Tennis** **Units 1-1.5**  
*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is an introduction to the rules, etiquette, fundamentals, and strategy of tennis. Physical conditioning, agility and the carry-over value of the activity are stressed. (UC, CSU)

**P E 024A Beginning Power Volleyball** **Units 1-1.5**  
*Prerequisites:* None.  
*Prerequisite Skills:* None  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.  
 This course is an introduction to the rules, fundamentals, and strategy of power volleyball. Carry-over value of the activity is stressed. (UC, CSU)

**P E 024B Intermediate Power Volleyball Units 1-1.5**

*Prerequisites:* P E-024A Beginning Power Volleyball each with a grade of “C” or better and.

*Prerequisite Skills:* None

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an extension of beginning volleyball. The basic fundamentals of skills of the serve, spike, forearm pass, and overhand set are reviewed. Appropriate defensive skills are introduced, the block and the dig. These skills allow the participant a higher level of competition. (UC, CSU)

**P E 024C Advanced Power Volleyball Units 1-1.5**

*Prerequisites:* P E-024B Intermediate Power Volleyball each with a grade of “C” or better.

*Prerequisite Skills:* None

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a review of the rules, fundamentals, and strategy of power volleyball. Physical conditioning, ability, and the carry-over value of the activity are stressed. Game play is emphasized. (UC, CSU)

**P E 025A Beginning Basketball Units 0.5-1**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the student the fundamentals of basketball and to develop an understanding of the basic game. (CSU)

**P E 025B Intermediate Basketball Units 0.5-1**

*Prerequisites:* P E 25A.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the student with a review of the fundamentals of basketball and basic strategy. This course emphasizes team play. (CSU)

**P E 025C Advanced Basketball Units 0.5-1**

*Prerequisites:* P E 25B.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the student with a review of the fundamentals of basketball and basic strategy. The student applies the skills learned to develop a philosophy of basketball. (CSU)

**P E 026A Beginning Soccer Units 1-1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide fundamental skills and techniques of soccer to the beginner. Dribbling, passing, heading, defensive skill, goal tending, and strategy are stressed. (CSU)

**P E 026B Intermediate Soccer Units 1-1.5**

*Prerequisites:* P E 26A.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to give the intermediate student more practice, team play, and individual skill techniques. The emphasis is on team work. (CSU)

**P E 026C Advanced Soccer Units 1-1.5**

*Prerequisites:* P E 26B.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is for the advanced soccer student. The emphasis is on tactics, team play, strategy, and individual position play. (CSU)

**P E 026D Indoor Soccer Units 1-1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide fundamental skills and techniques of soccer to the beginner. Dribbling, passing, heading, defensive skills, goal tending, and strategy are stressed. (CSU)

**P E 027B Beginning Baseball Units 1-2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to develop skills and techniques used in the sport of baseball. Emphasis is placed on the individual needs of students. (CSU)

**P E 027C Advanced Baseball Units 1-2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to develop and enhance the fundamental skills acquired in the elementary course. More detail is involved in the approach to each individual’s skill levels. (CSU)

**P E 028E Beginning Softball Units 1-1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed for the student to improve fundamental softball skills and to educate the student of current and new rules pertaining to the game of softball. The student participates in active learning with experience being given in offensive and defensive strategies including game and tournament play. (CSU)

**P E 028F Intermediate Softball Units 1-1.5**

*Prerequisites:* P E 28E.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed for the student to enhance the fundamental skills required in the beginning course. More emphasis is placed on proper techniques and execution of acquired skills. Team strategies are emphasized. (CSU)

**P E 028G Advanced Softball Units 1-1.5**

*Prerequisites:* Qualified performer.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a course designed for the student with advanced softball skills. Emphasis is placed on conditioning, rule interpretation, and individual skill improvement. (CSU)

**P E 029A Beginning Touch Football Units 1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the rules, fundamentals, and strategy of touch football. Physical conditioning, agility, and the carry-over value of the activity are stressed. (CSU)

**P E 029B Intermediate Touch Football**      **Units 1.5***Prerequisites: P E 29A.**Limitations on Enrollment: None.**Advisories: None.*

This course is a review of the rules, fundamentals, and strategy of touch football. Physical conditioning, agility, and the carry-over value of the activity are stressed. (CSU)

**P E 029C Advanced Touch Football**      **Units 1.5***Prerequisites: P E 29B.**Limitations on Enrollment: None.**Advisories: None.*

This course is a review of the rules, fundamentals, and strategy of touch football. Physical conditioning, agility, and the carry-over value of the activity are stressed. Game play is stressed. (CSU)

**P E 031A Beginning Bowling**      **Units 1-1.5***Prerequisites: None.**Prerequisite Skills: 1. Reading level II.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the rules and fundamentals of bowling. It is designed to create an interest in and a carry over value for the game of bowling. (UC, CSU)

**P E 031B Intermediate Bowling**      **Units 1-1.5***Prerequisites: P E-031A Beginning Bowling each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to review the basic skills of bowling and to learn the intermediate skills of the game. (UC, CSU)

**P E 031C Advanced Bowling**      **Units 1-1.5***Prerequisites: P E-031B Intermediate Bowling each with a grade of "C" or better.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to review the basic skills of bowling. Emphasis is on tournament and league play. (UC, CSU)

**P E 032A Beginning Golf**      **Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to emphasize the fundamentals of grip, stance, and swing. Stress is placed upon putting. Rules and etiquette are presented. Participation on the golf course is encouraged. (CSU)

**P E 032B Intermediate Golf**      **Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to emphasize the fundamentals of grip, stance, and swing. Stress is placed upon chipping and driving. Rules and etiquette are reviewed. Participation on the golf course is encouraged. (CSU)

**P E 032C Advanced Golf**      **Units 1-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to emphasize play on the golf course. Fundamentals, rules, and etiquette are reviewed. (CSU)

**P E 034A Beginning Badminton**      **Units 0.5-1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the rules, etiquette, fundamentals, and strategy of badminton. Physical conditioning, agility, and the carry-over value of the activity are stressed. (CSU)

**P E 034B Intermediate Badminton**      **Units 0.5-1.5***Prerequisites: P E 34A.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to review and apply the rules, etiquette, fundamentals, and strategy of badminton in both singles and doubles match play. (CSU)

**P E 034C Advanced Badminton**      **Units 0.5-1.5***Prerequisites: P E 34B.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to focus on refinement of advanced level badminton skills, strategies, and match play in both singles and doubles play. (CSU)

**P E 038D Intramural Basketball**      **Units 0.5-1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the rules, etiquette, fundamentals and strategy of basketball and includes the student's participation in intramural competition. (CSU)

**P E 038N Intramural Tennis: Singles**      **Units 0.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is offered for tennis singles in school-wide competition. (CSU)

**P E 039E Adapted Swimming**      **Units 1-1.5***Prerequisites: Physician authorization.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the physically limited student. The student works on developing his or her own individual programs in the swimming pool. Physical conditioning, awareness of the body's capabilities, agility, and life-long activities are stressed. (CSU)

**P E 039F Adapted Conditioning**      **Units 1-1.5***Prerequisites: Physician authorization.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the physically limited. The student works on individual programs. Physical conditioning, awareness of the body's capabilities, agility, and life-long activities are stressed. (CSU)

**P E 040 Introduction to Physical Education and Exercise Science Units 3***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course will explore the foundation, current trends, issues and developments of physical education and related fields of exercise science, health education, fitness, and sport. Students will be introduced to various teaching and non-teaching career opportunities in physical education, exercise science, health education, fitness and sport. (CSU)

**P E 042J Theory of Track and Field Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to meet the needs of the student in the community by preparing the student to teach and coach track and field with a practical and effective approach. Emphasis is given to the most recent trends in training techniques for each of the track and field events. (UC, CSU)

**P E 042K Theory of Baseball Offense Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the student a practical, effective, and up-to-date approach in teaching and coaching the offensive skills of baseball. Particular attention is paid to hitting technique, hitting drills, correction of faults, mental approach, bunting, baserunning, and offensive strategy and philosophy. (UC, CSU)

**P E 042L Theory of Baseball Defense Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the student a practical, effective, and up-to-date approach in teaching and coaching the defensive skills of baseball. Particular attention is paid to defensive technique at each position, individual defensive drills, team defensive drills, team defensive strategy, pitching, and catching. (UC, CSU)

**P E 042M Beginning Theory of Offensive Football Units 2***Prerequisites: Physician authorization.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach elementary offensive football. Offensive overviews, establishing formation concepts, areas of attack dual system, backfield actions, cadence, line symbols and term line stance, back stance, types of blocks, recognition of defenses, and offensive kicking game are covered. Kick off return, point after touchdown, field goal, and the running game are stressed. (UC, CSU)

**P E 042N Advanced Theory of Offensive Football Units 2***Prerequisites: P E 42M.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to help the student perform coaching and teaching assignments at lower levels from Pop Warner to high school football. The student learns to establish a football system of offense. (UC, CSU)

**P E 042O Beginning Theory of Defensive Football Units 2***Prerequisites: Physician authorization.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the philosophy, technology, and strategy of defensive football played at the college level. (UC, CSU)

**P E 042P Advanced Theory of Defensive Football Units 2***Prerequisites: P E 42O.**Limitations on Enrollment: None.**Advisories: None.*

This course is a review of the philosophy, terminology, and strategy of defensive football played at the college level. (UC, CSU)

**P E 042Q Beginning Coaching of Offensive Football Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach the coaching and demonstration of offensive techniques. Activities are designed for those who will coach the lower levels through Pop Warner and high school football. The fundamentals of the elementary level of running, throwing, catching, and blocking are stressed. [UC, CSU]

**P E 042R Intermediate Coaching of Offensive Football Units 2***Prerequisites: P E 42Q.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach the coaching and demonstration of intermediate offensive techniques. Activities are designed for those who will coach the lower levels through Pop Warner and high school football. The fundamentals of the intermediate level of running, throwing, catching, and blocking are stressed. (UC, CSU)

**P E 042T Beginning Coaching of Defensive Football Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach the coaching and demonstration of defensive techniques. Activities are designed for those who will coach the lower levels through Pop Warner and high school football. The fundamentals of the intermediate level of running, throwing, catching, and tackling are stressed. (UC, CSU)

**P E 042U Intermediate Coaching of Defensive Football Units 2***Prerequisites: P E 42T.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to teach the coaching and demonstration of intermediate defensive techniques. Activities are designed for those who will coach the lower levels through Pop Warner and high school football. The fundamentals of the intermediate level of running, throwing, catching, and tackling are stressed. (UC, CSU)

**P E 042V Theory and Application of Weight Training Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the student to past, present, and future conditioning. The student learns how to set up, design, and implement a complete strength training and conditioning program for various populations. (UC, CSU)

**P E 043 Introduction to Athletic Training Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed as an introduction to the field of athletic training. The course emphasizes athletic training competencies including the prevention, evaluation, immediate care, and rehabilitation of athletic injuries. (CSU)

**P E 045 Special Projects: Physical Education Units 1-2**

*Prerequisites: Completion of survey course with grade of "B" or better and presentation of a project acceptable to the instructor and division chairperson.*

*Limitations on Enrollment: None.**Advisories: None.*

This course is open to the student qualified to do advanced work in the field. The course may include research, directed reading, field work, or other advanced study, and the course may be repeated for a maximum total of four units. (CSU)

**P E 046 Recreational Leadership Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the student to the field of recreation as a profession and active involvement in leadership roles. (CSU)

**P E 048 Exercise Science Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the basic concepts of anatomy, physiology, nutrition, kinesiology, and exercise physiology to the student interested in how and why training programs affect health and fitness. This course is designed for the student majoring in physical education. (CSU)

**P E 049 Psychology of Sports Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the professional field of sport psychology. Classroom experiences are designed to acquaint the student with individual skills and coaching techniques necessary in the area of sport psychology. (CSU)

**P E 050 Nutrition for Fitness and Sport Units 3***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the student to the fundamentals of nutrition as they impact health, fitness, and sports performance. Particular emphasis is given to basic nutrition, diet analysis, weight control, special diets, eating disorders, and the use of ergogenic aids. (CSU)

**P E 051 Fitness Assessment and Exercise Prescription Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to aid the student in synthesizing the important principles and theories in exercise physiology, kinesiology, nutrition, testing, and measurements and applying them to physical fitness testing and individualized exercise program design. (CSU)

**P E 070 Introduction to Sport Management Units 3**

*Prerequisites: Reading level II or reading level I with prerequisites.*

*Limitations on Enrollment: None.**Advisories: None.*

This course is designed to orient the beginning student to the academic and professional field of sport management.

**P E 080 Selected Topics: Physical Education Units 0.5-3***Prerequisites: None; exempt from assessment testing.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of physical education not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**P E 101 Adapted Physical Education Units 0***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the physically limited. Students work on individual programs. Physical conditioning, awareness of body's capabilities, agility and life long activity are stressed.

**P E 112 Active Seniors Units 0***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to address the underlying cause of cardiovascular and other diseases associated with aging and the therapeutic importance of physical activity during the years over 60. The major topics include: the atrophy of disuse, exercise, diet, and nutrition. The student can pursue physical activity at own rate.

## PHYSICAL SCIENCE

**PHSCI 001 Matter and Energy Units 3**

*Prerequisites: MATH 80 or MATH 83A and MATH 83B with a grade of "C" or better.*

*Limitations on Enrollment: None.**Advisories: None.*

This course is an introduction to the physical sciences for the student with a limited science background. Topics include astronomy, physics, chemistry, meteorology, and geology. Demonstrations and student involvement are stressed. (UC, CSU)

## PHYSICS

### PHYSIC 002A General Physics Units 4

*Prerequisites:* MATH 31 with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to include the following: linear and two-dimensional motion; conservation laws of energy and momentum; rotational motion; thermodynamics with special attention to energy conservation and alternative energy sources like solar energy; vibrations and waves; and special relativity. (UC, CSU, CAN PHYS 2, CAN PHYSIC SEQ A with both PHYSIC 2A and 2B)

### PHYSIC 002B General Physics Units 4

*Prerequisites:* PHYSIC 2A with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to cover topics in electricity and magnetism, geometric and physical optics, and introductory modern physics. Electricity and magnetism covers direct-current (DC) circuit theory, use of the oscilloscope, and frequency-dependent alternating-current (AC) circuit analysis; modern physics includes relativity, atomic structure, the nucleus, and nuclear energy. (UC, CSU, CAN PHYS 4, CAN PHYSIC SEQ A with both PHYSIC 2A and 2B)

### PHYSIC 004A Principles of Physics: Mechanics Units 4

*Prerequisites:* MATH 2 with grade of “C” or better or concurrent enrollment in MATH 2.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an advanced course in the analysis of systems based upon concepts of kinematics and dynamics. Topics include linear and two-dimensional motion, Newton’s Laws, conservation laws of energy and momentum, rotational motion, and harmonic motion. PHYSIC 4A is intended for the Engineering and Physics major. (UC, CSU, CAN PHYS 8)

### PHYSIC 004B Principles of Physics: Waves, Sound, and Thermodynamics Units 4

*Prerequisites:* MATH 2 and PHYSIC 4A, each with grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a continuation of PHYSIC 4A with further analysis of harmonic motion extended to wave phenomena as exhibited by sound, light, and particles. Some modern physics is covered, including relativity, atomic theory, and quantum theory. Heat transfer and the first and second laws of thermodynamics, as applied to heat engines, are covered. (UC, CSU, CAN PHYS 14)

### PHYSIC 004C Principles of Physics: Electricity and Magnetism Units 4

*Prerequisites:* MATH 2 and PHYSIC 4A, each with grade of “C” or better; MATH 3 with grade of “C” or better or concurrent enrollment in MATH 3.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to cover topics in static electricity, Coulomb’s Law, electric fields, and potential. Circuit theory is not emphasized; however, laboratory topics introduce use of measuring instruments for the various circuit parameters. The triode, transistor, and op-amp are examined. Magnetism includes the laws of Ampere, Faraday, and Maxwell. Alternating-current (AC) circuit elements and their response to variable-frequency signals are studied. (UC, CSU, CAN PHYS 12)

### PHYSIC 010 Introduction to Physics Units 4

*Prerequisites:* MATH 80 or MATH 83A & B each with a grade of “C” or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the fundamentals of physics to students with no previous background in the subject. The course content surveys selected topics in the areas of mechanics, heat, wave motion, optics, electricity, magnetism, and sound. Emphasis is on practical application through laboratory work involving extensive instrumentation and measuring techniques. This course is not designed for the science or engineering major. (UC, CSU)

## PLANT SCIENCE

### PLANT 010 Principles of Plant Science Units 3

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the student with a working knowledge of the fundamental structures and processes of plants. The course includes principles of plant structures, physiology, hereditary, environmental relationship to growth, adaptation, and management of crops. Techniques of research, exploration of plant growth, and identification of economical crops are included. (UC, CSU, CAN AG 8)

### PLANT 010L Principles of Plant Science Laboratory Units 1

*Prerequisites:* PLANT-010 Principles of Plant Science each with a grade of “C” or better or.

*Prerequisite Skills:* None.

*Corequisites:* PLANT-010 Principles of Plant Science each with a grade of “C” or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to use experiments and observations related to the principles of plant science. The student learns through numerous hands-on experiences. Field trips are taken to observe specific crop practices. (UC, CSU, CAN AG 8)

### PLANT 014 Soil Science Units 4

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to cover physical, chemical, and biological properties of soils as influenced by climate, parent material topography, and time. Field trips are included to observe specific soil formations. (UC, CSU, CAN AG 14)

### PLANT 036A Deciduous Fruit and Grape Production Units 3

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to study almonds, apricots, cherries, peaches, walnuts, wine grapes, and table grapes. Fundamentals of cultural practices including training, pruning, propagation, and rootstocks will be stressed. Use of the Delta College orchard and vineyard is emphasized. One all-day field trip required. (UC, CSU)

**PLANT 050H Special Studies: Plant Science Units 1-2**

*Prerequisites:* None.

*Prerequisite Skills:* 1. Division Approval Presentation to Instructor and Division Chair for approval of special studies project.

*Corequisites:* PLANT-010 Principles of Plant Science or PLANT-014 Soil Science.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is offered to any student who is qualified to do advanced work and wishes to pursue a problem through reading or other advanced study, if his proposed project is acceptable and approved by instructor and the division chairperson. May be repeated for a maximum of four units. (CSU)

**PLANT 075 Selected Topics: Plant Science Units 0.5-3**

*Prerequisites:* None; exempt from assessment testing.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of plant science not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**PLANT 096V Work Experience: Plant Science Units 1-8**

*Prerequisites:* None.

*Limitations on Enrollment:* The student must enroll in a course that is directly related to the plant science work experience. The student must enroll in a minimum of 7 units during the semester including work experience units. For summer session, the student must enroll in one related course in addition to work experience. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of work experience program objectives and an employer work experience agreement.

*Advisories:* GUID 30, 31, 32, 33.

This course is designed for the student employed in the area of plant science. The course objectives are developed by the students in consultation with his or her supervisor. The student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college work experience instructor. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140.

## POLITICAL SCIENCE

**POLSC 001 American Government and Institutions Units 3**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the fundamentals of government and the political processes at the national, state, and local levels. Included are studies of basic issues confronted by the American people and their governing institutions. The course fulfills the Social Science (Group A) requirements for the AA degree and applies toward completion of the requirement in U.S. History and California state and local government. (UC, CSU, CAN GOVT 2)

**POLSC 002 Introduction to Comparative Politics Units 3**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* ENG-001A each with a grade of "C" or better.

This course is an introduction to the field of comparative politics. The course surveys a number of basic topics and themes central to the study of comparative political systems. Topics to be examined include: political power, political culture and socialization, participation in politics, governmental structures, democratization, economic policies and development. These topics will be explored in selected countries from Asia, Europe, Africa, and the Middle East, and North America.

**POLSC 005 International Relations Units 3**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the field of International Relations. The course surveys theoretical approaches to international relations, international conflict and cooperation, global issues, and the United States as a world power. (UC, CSU)

**POLSC 010 Introduction to Political Science Units 3**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the field of political science. The course surveys the scope and methods of the discipline, explores contemporary political theory and ideology, and compares varying types of political systems. (UC, CSU)

**POLSC 015 Selected Topics: Political Science Units 0.5-2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This topics course is designed to offer instruction in one of the specialized areas of Political Science not already covered by the existing curriculum. (CSU)

**POLSC 020 California State and Local Government Units 3**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the fundamentals of California state and local government and the political processes. The course includes the study of basic issues confronted by California state, county, city, and regional governments. (CSU)

**POLSC 050H Special Studies: Political Science Units 1-2**

*Prerequisites:* Presentation of a project acceptable to the instructor and the division chairperson; Political Science 1 or 10 with grade of "B" or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to allow the qualified student to do advanced work in the field. The course includes research, directed reading, field work, or other advanced study. The course may be repeated for a maximum total of four units. (CSU)

**POLSC 051H Government Internship Units 3-4**

*Prerequisites:* Completion of one of the following courses with a grade of "B" or better: POLSC 1, POLSC 5, or POLSC 10.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to place the student who is in local government departments, district offices or law firms where he/she engages in specific research projects related to his/her position. The student works for 9-12 hours per week. Student units will be determined at a rate of one unit for three hours in internship per week. May be repeated for credit three times. (CSU)

## PSYCHIATRIC TECHNOLOGY

**PT 080 Foundations of Nursing Units 8.5**

*Prerequisites:* BIOL 31 or BIOL 33 or BIOL 11; H S 36; HS/FCS 19; PSYCH 1. A grade of "C" or better in each prerequisite course with a minimum GPA of 2.5 from prerequisite courses is required.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to introduce student to the fundamental issues and trends in nursing, focusing on the collaborative roles of the Registered Nurse, Licensed Vocational Nurse, Psychiatric Technician and the Certified Nurse Assistant. Included in the content are the basic concepts of anatomy and physiology, the mechanisms of disease, and the sciences of nutrition and pharmacology. Wholism is introduced as the theoretical framework used by the student in identification of patient needs. The clinical component of the course focuses on care of the geriatric client.

**PT 081 Introduction to Medical-Surgical Nursing Units 8.5**

*Prerequisites:* P T 80 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to introduce the student to the nursing care of patients with common medical-surgical disorders of the cardiovascular, respiratory, and endocrine systems, and that of the eye and ear. The clinical focus of this course is the nursing care of adult patients with an uncomplicated course of treatment utilizing the concept of wholism. Application of principles of asepsis to pre-operative and post-operative patient management is discussed.

**PT 082 Psychiatric Technician Nursing Units 8**

*Prerequisites:* P T 81 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to prepare the student to provide care to mentally ill clients in acute and chronic psychiatric settings. Emphasis is placed on current trends, legislation, stress adaptation, communication, diagnostic criteria, therapeutic techniques, cultural sensitivity, and the principles of wholism.

**P T 083 Advanced Psychiatric Technician Nursing Units 4.5**

*Prerequisites:* P T 82 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to present mental health concepts of forensics, disorders of infancy, childhood, and adolescence, impulse control, eating disorders, substance abuse, personality disorders, violence, and sexual dysfunction. Emphasis is placed on treatment, prevention, and community resources.

**P T 084 Developmental Disabilities Nursing Units 6**

*Prerequisites:* P T 83 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to prepare the Psychiatric Technician student to provide wholistic care to the developmentally disabled client. Emphasis is placed on diagnostic criteria, ethical issues, learning theories, language, behavior, and behavior modification. The student learns and practices basic leadership and supervisory techniques in the last week of this course.

**P T 085 Advanced Developmental Disabilities Nursing Units 5.5**

*Prerequisites:* P T 84 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Psychiatric Technician Program.

*Advisories:* None.

This course is designed to broaden the student's understanding and knowledge of developmental disabilities. The focus is on specific physical and medical problems of the developmentally disabled. Developmental syndromes, causes, characteristics, prevention, nursing care, interventions and treatment, including pharmacology, are included.

## PSYCHOLOGY

**PSYCH 001 Introduction to Psychology Units 3**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the scientific study of behavior through an exploration of the major concepts and research in the field of psychology. The course provides the basic foundation for more advanced courses in psychology. (UC, CSU, CAN PSY 2)

**PSYCH 002 Statistical Methods For Psychology & Social Science Units 3**

*Prerequisites:* MATH-082 Intermediate Algebra each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* PSYCH-001 each with a grade of "C" or better.

This course is designed to acquaint the student with elementary techniques used in statistical analysis. Emphasis is on descriptive statistics, elementary probability concepts, probability distributions, statistical inference, and simple linear regression analysis, with applications in psychology, and social science.

**PSYCH 003 Personal and Social Psychology Units 3***Prerequisites: PSYCH 1.**Limitations on Enrollment: None.**Advisories: None.*

This course is an exploration of the process of human adjustment by examining the assumption of mental health, how personality develops, the types of deviant behavior, the process of creativity, the varieties of psychotherapy, and the application of adjustment concepts to social situations. (UC, CSU)

**PSYCH 004 Introduction to Experimental Psychology Units 3***Prerequisites: PSYCH 1.**Limitations on Enrollment: None.**Advisories: None.*

This course is an introductory course involving the application of the scientific method to the analysis of behavior. Experimental techniques, designs, examination of experimental assumptions, limitations and advantages, as well as student participation are stressed. This course is designed for the behavioral or social science major. (UC, CSU, CAN PSY 8)

**PSYCH 006 Lifespan Psychology Units 3***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with an understanding of lifespan psychology from conception through aging and dying. The impact of family, culture, and socio-economic factors is stressed. Theoretical understanding of lifespan issues provide the student with a foundation for exploration of his/her practical implications at each stage of development. (CSU,UC)

**PSYCH 007 Abnormal Psychology Units 3***Prerequisites: PSYCH 1.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with an understanding of abnormal behavior as delineated in the "Diagnostic and Statistical Manual of Mental Disorders." Topics include classifications, clinical pictures, casual factors, treatment, and outcomes of maladaptive patterns, assessment, therapy, and prevention. (UC, CSU)

**PSYCH 008A Community Advocacy: Drug and Alcohol Prevention Strategies Units 1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to present the resources in cities and counties in order to prevent and reduce health and safety problems relating to drug and alcohol use. The student learns a variety of community-based prevention strategies and puts these strategies into practice. Issues related to public, social, and retail environments as well as the role media plays in our homes and communities are discussed. The student gains an understanding of what community initiatives are and what is required to put a variety of environmental prevention strategies to work. (CSU)

**PSYCH 008B Community Advocacy: Drug and Alcohol Education Programs Units 1.5***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop the student's basic understanding of the cause as well as some efforts to deal with prevention efforts to stop an individual from using drugs or alcohol. Principles of individual prevention efforts, which aid the human services worker in mobilizing the community are included. The information provides the student with the skill to utilize the neighborhood resources to arrange education programs directed toward providing youth with positive assets for dealing with peer pressure. The course aids the human services student in establishing a positive workign relationship with the community. (CSU)

**PSYCH 012 Introduction to Probability and Statistics Units 4***Prerequisites: MATH 82, or 84A and 84B, each with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to acquaint the student with elementary techniques used in statistical analysis. Emphasis is on descriptive statistics, elementary probability concepts, probability distributions, statistical inference, and simple linear regression analysis, with applications in business administration, education, natural sciences, psychology, and social science. A graphing calculator is recommended. Instructor demonstrations utilize the TI-83 calculator. (UC, CSU, CAN STAT 2)

**PSYCH 015 Selected Topics: Psychology Units 1-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one of the specialized areas of psychology not already covered by the existing curricula. (CSU)

**PSYCH 020A Stress Management Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to acquaint the student with the role stress plays in the life of an individual. The material is focused on the effects of stress and how to manage stress. (CSU)

**PSYCH 020B Stress Management and Adaptation Units 2***Prerequisites: None. Limitations on Enrollment: None.**Advisories: None.*

This course is an in-depth examination of the physiological, psychological and social nature of stress and relaxation. The participant learns the use of psychological principles and methods in adapting to life situations. (CSU)

**PSYCH 024 Psychology of Aging Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a study of the changes that occur in sensory and motor functioning, perception, memory, emotions, intelligence, and personality of the aging person. Attention is given to social cultural, and economic factors that impinge upon aging persons and current programs that attempt to deal with these factors. (CSU)

**PSYCH 030 Human Sexuality Units 3**

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a survey of the physiological, social, and behavioral aspects of human sexuality. The course is academic rather than therapeutic. (UC, CSU)

**PSYCH 038 Counseling Skills for Human Service Workers Units 3**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an introduction to the counseling process through examination of the roles and characteristics of the counselor and the client. Basic skills involved in problem identification and problem solving are discussed and practiced through simulated role situations. The student learns to use his/her relationship with clients to develop the alliance necessary for change. The student is informed of the range of careers to which these skills can be applied. (CSU)

**PSYCH 039 Client Interview, Evaluation, and Referral Units 2**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a review of basic client interview skills for the counselor. The course explores establishing rapport with clients, enlisting the client in the development of treatment plans, and making appropriate client referrals. The student practices active listening and other communication skills in simulated client interview settings. (CSU)

**PSYCH 040 Case Management and Treatment Planning Units 3**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a review of basic skills for effective and efficient case work management including goal analysis, identification and specification of client objectives, case planning, client contracting, data collection and record keeping, and client progress evaluation and reporting. Skills are applied using actual client examples. Participants write case plans, client contracts and treatment goals, and demonstrate mastery of all other case work management skills. (CSU)

**PSYCH 045A Beginning Field Practicum Units 2**

*Prerequisites:* Completion of or concurrent enrollment in PSYCH 1 or SOCIO 1A.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to provide an opportunity for the student to have guided experiences in human service agencies. The student observes professional staff working with clients in public agencies and engages in supervised internship at a social service agency. One hour in class is required each week to integrate practical experiences with theory learned in psychology and sociology courses. (CSU)

**PSYCH 045B Intermediate Field Practicum Units 1-2**

*Prerequisites:* Completion of or concurrent enrollment in PSYCH 1 or SOCIO 1A.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to provide an opportunity for the student to have guided experiences in human service agencies. The student observes professional staff working with clients in public agencies and engages in supervised internship at a social service agency. One hour in class is required each week to integrate practical experiences with theory learned in psychology and sociology courses. (CSU)

**PSYCH 046 Individual Counseling in Human Service Programs Units 3**

*Prerequisites:* Completion of or concurrent enrollment in PSYCH 1; reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to stress basic skills for effective one-on-one counseling in human service programs through discussion and simulated counseling situations. The student examines his/her own counseling styles and identifies needed modifications with the assistance of the instructor and peers. (CSU)

**PSYCH 047 Group Counseling in Human Services Programs Units 3**

*Prerequisites:* Completion of or concurrent enrollment in PSYCH 1.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a review of group counseling methods with an emphasis on an eclectic approach to group facilitation. Learning is derived from experiences in simulated group interaction and from subsequent analysis with the instructor and peers. The student learns to identify personal style as a group leader and describe modifications needed in group facilitation techniques. The student learns to use his/her relationship with clients to develop the alliance necessary for change. The student will learn the range of careers to which these skills can be applied. (CSU)

**PSYCH 048 Family Counseling in Human Service Programs Units 2**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an examination of principles and methods related to understanding and working with families in human service programs. Family systems and interactions are explored through a review of current articles and demonstration of intervention methods in simulated family counseling situations. The participant identifies personal styles as family counselors and describes modifications needed to improve family counseling skills. (CSU)

**PSYCH 050H Special Studies: Psychology Units 1-2**

*Prerequisites:* Presentation of a project acceptable to the instructor and the division chairperson; Psychology 1, 3, or 4 with grade of "B" or better.  
*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed for the student qualified to do advanced work in the field. The course may include research, directed reading, field work, or other advanced study. The course may be repeated for a maximum of 4 units. (CSU)

**PSYCH 052 Introduction to Substance Abuse Counseling Units 3**

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an overview of the field of substance abuse counseling. Emphasis is placed on career challenges and opportunities. Evaluation, assessment, and counseling methods are discussed. Legal and community resources available to provide assistance are explored. (CSU)

**PSYCH 053 Drugs and Society Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to give the student a basic pharmacology of the drugs of abuse as well as some effective skills to deal with the lifestyle of the abuser. The information provided aids the human services students in establishing a positive counseling relationship with drug dependent individuals and in giving those individuals life-skills. (CSU)

**PSYCH 055 Introduction to Child Abuse Counseling Units 2***Prerequisites: Completion of or concurrent enrollment in PSYCH 1 or SOCIO 1A.**Limitations on Enrollment: None.**Advisories: None.*

This course is a study of the dynamics of child abuse. Emphasis is placed on learning to understand prevention and intervention services for victims of child abuse and their families. Legal and community resources available to victims and families are explored. (CSU)

**PSYCH 056 Assisting Sexual Assault Victims Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is a study of the sexual assault of adults and children. Legal and community resources available to victims and families are explored. Emphasis is placed on learning to provide crisis intervention for survivors of sexual assault and their families. (CSU)

**PSYCH 057 Introduction to Gerontology Counseling Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide the student with an overview of the field of gerontology counseling and the aging process and its impact on the emotional health of the elderly. Emphasis is placed on career challenges and opportunities in the field of gerontology and on specialists working with geriatrics. (CSU)

**PSYCH 075 Selected Topics: Psychology Units 0.5-3***Prerequisites: None; exempt from assessment testing.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of psychology not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## RADIO AND TELEVISION

**RTV 001 Introduction to Broadcasting Units 2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to examine the nature and development of radio and television with special emphasis on the persuasive powers of broadcast media in shaping American culture. The processes of broadcast communication's role in society are investigated along with the impact of the media on economic issues. (CSU)

**RTV 005 Selected Topics: Radio/Television Units 0.5-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to enable the College to offer instruction in one of the specialized areas of radio/television not already covered by the existing curriculum. (CSU)

**RTV 011 Fundamentals of Radio Production Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the fundamentals of radio production and the methods by which radio productions are developed. The student learns to apply tools and techniques employed to create broadcast-quality programming. (CSU)

**RTV 012 Techniques of Radio Production Units 3***Prerequisites: RTV 11 with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop skills in radio production including digital production, audio console operation, use of tape recorders and microphones, tape editing, program formats, and announcing. (CSU)

**RTV 013 Radio Production Workshop Units 4***Prerequisites: RTV 71 and RTV 12, each with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide opportunity for the student's development in all aspects of radio station on-air operations. The course includes development of operational activities, including live broadcasting, music, public service, and community service broadcasting. (CSU)

**RTV 021 Fundamentals of Television Production Units 3***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to introduce the fundamentals of television production and the methods by which television productions are developed. The student learns to apply tools and techniques employed to create broadcast-quality programming. (CSU)

**RTV 022 Techniques of Television Production Units 3***Prerequisites: RTV 21 with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to develop skills in television production, including audio and video, and use of microphones, audio recorders, cameras, lenses, switchign, and lighting equipment. (CSU)

**RTV 023 Television Production Workshop Units 4***Prerequisites: RTV 71 and RTV 22, each with a grade of "C" or better.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide student development in all aspects of television production. The course includes development of operational activities as well as public service and community service broadcasting. (CSU)

**RTV 050H Special Studies: Radio/Television Units 1-2**

*Prerequisites:* RTV 1, with a grade of "B" or better; presentation of a project acceptable to the instructor and the division chairperson.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to allow a qualified student to do advanced work in the field of radio/television. The course includes research, directed reading, field work, or other advanced study. This course may be repeated for a maximum of 4 units. (CSU)

**RTV 071 Broadcast Announcing Units 2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the practical skills and techniques employed by the professional broadcast announcer. Topics include on-air personality, vocal control, pronunciation, and related skills for radio and television.

**RTV 080 Selected Topics: Radio/Television Units 0.5-3**

*Prerequisites:* None; exempt from assessment testing.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of radio/television not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

## RADIOLOGIC TECHNOLOGY

**RAD 010 Introduction to Radiography Units 3.5**

*Prerequisites:* H S-036 Medical Terminology and Speech each with a grade of "C" or better and BIOL-033 Anatomy & Physiology each with a grade of "C" or better or BIOL-031 Human Anatomy each with a grade of "C" or better and BIOL-032 Human Physiology each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital. Finger printing & Criminal Record Clearance and.

*Advisories:* None.

This course is designed to provide an overview of the field of Radiologic Technology. Emphasis is placed on methods of promoting optimal patient care and the importance of developing a professional and caring attitude. Ethics and professional organizations are covered. Factors required for X-ray production are discussed including detailed instruction of the beneficial and destructive potentials of ionizing radiation. Safe radiation protection procedures for self, patients, and hospital personnel are discussed. The course includes body mechanics, infection control, and fundamentals of venipuncture and medical computer systems. (CSU)

**RAD 010A Beginning Clinical Laboratory Units 3**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* RAD-010 Introduction to Radiography.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide an introduction to clinical radiographic training. The course includes practical training in the functions of the darkroom, office, computer systems, file rooms, and training involving patient transportation. An introduction to x-ray equipment and technical factor selection is included, as well as lab practice in venipuncture. (CSU)

**RAD 010B Intermediate Clinical Laboratory Units 6**

*Prerequisites:* RAD-010A Beginning Clinical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to provide clinical radiographic training. The course includes examinations of the chest, extremities, shoulder and pelvic girdles and abdomen all done under direct supervision. Technical factor selection and equipment manipulation are included. Portable and operating room radiography are also included in this course. (CSU)

**RAD 011 Radiographic Positioning and Terminology Units 6**

*Prerequisites:* RAD-010 Introduction to Radiography each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-012 Radiographic Anatomy and RAD-013 Principles of Radiographic Technique.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce positioning techniques, medical terminology, and anatomy as they relate to the chest, abdomen, extremities, shoulder and pelvic girdles, spinal column, and alimentary system. Portable and operating room procedures, proper equipment selection, immobilization, and radiation protection procedures are stressed. Identification of anatomical structures is supported through film critique sessions of radiographs. (CSU)

**RAD 012 Radiographic Anatomy Units 2**

*Prerequisites:* RAD-010 Introduction to Radiography each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-011 Radiographic Positioning and Terminology and RAD-013 Principles of Radiographic Technique.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce anatomical terminology; cell division; structure of skin, bones and joints; as well as structure of the extremities, vertebral column, and thorax. Radiographic imaging methods of these structures are presented, as well as common pathological conditions identified in radiography. (CSU)

**RAD 013 Principles of Radiographic Technique Units 4**

*Prerequisites:* RAD-010 Introduction to Radiography each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-011 Radiographic Positioning and Terminology and RAD-012 Radiographic Anatomy.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce the student to the principles involved in producing a diagnostic radiograph. The course includes detailed instruction in radiographic film, equipment, and accessories utilized in image production. The primary factors of kilovoltage (KV), milliamperage (MA), time, and distance are explained. Practical application of exposure calculations is performed. Also included is: discussion of the sensitometric properties of x-ray film; quality control, patient characteristics; pathological conditions relative to technique selection; the principles and designs of radiographic technique charts; and fundamental principles of digital radiography and fluoroscopy. (CSU)

**RAD 014 Darkroom Chemistry and Processing Units 1**

*Prerequisites:* RAD-013 Principles of Radiographic Technique each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to acquaint the student with: the principles associated with processing room design and function; film storage and handling, manual and automatic processing chemicals and techniques; automatic processor systems and functions; latent image formation; identification and causes of film artifacts, and silver recovery/fixer recycling systems. Also included are quality control and repeat analysis. (CSU)

**RAD 020 Advanced Radiographic Positioning and Terminology Units 4**

*Prerequisites:* RAD-011 Radiographic Positioning and Terminology each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-020A Advanced Clinical Laboratory and RAD-021 Advanced Radiographic Anatomy and RAD-022 Fundamentals of X-Ray and Radium Physics.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce positioning techniques, medical terminology, related anatomy, and preparation for specialized procedures including radiography: the bony thorax, skull, facial bones, sinuses, mastoids, urinary and biliary systems, circulatory systems, female reproductive system, sialography, tomography, pediatric radiography, and arthrography. Proper equipment selection, immobilization, and radiation protection procedures are stressed. Proper demonstration and identification of required anatomical structures are supported through film critique sessions of radiographs. An introduction to Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) is included. (CSU)

**RAD 020A Advanced Clinical Laboratory Units 8**

*Prerequisites:* RAD-010B Intermediate Clinical Laboratory each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-020 Advanced Radiographic Positioning and Terminology and RAD-021 Advanced Radiographic Anatomy and RAD-022 Fundamentals of X-Ray and Radium Physics.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to emphasize positioning techniques and technical factor calculation. An introduction to positioning of the skull, facial bones, mastoids, and the thorax is included. The student participates in specialized radiographic procedures including myelography, sialography, hystero-graphy, arthrography, arteriography, and other specialized procedures requiring sterile and aseptic techniques. (CSU)

**RAD 021 Advanced Radiographic Anatomy Units 2**

*Prerequisites:* RAD-012 Radiographic Anatomy each with a grade of "C" or better and.

*Prerequisite Skills:* None.

*Corequisites:* RAD-020 Advanced Radiographic Positioning and Terminology and RAD-020A Advanced Clinical Laboratory and RAD-022 Fundamentals of X-Ray and Radium Physics.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce the student to complex systems of the body. The course includes the structures of the various parts of each specialized system. The systems involved are the muscular, circulatory, digestive, genitourinary, nervous, endocrine, and others. Radiographic application of these systems is presented as well as common anomalies and pathologies related to these systems as indicated by radiographic examination. Detailed study of the skull and facial bones is included. (CSU)

**RAD 022 Fundamentals of X-Ray and Radium Physics Units 4**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* RAD-020 Advanced Radiographic Positioning and Terminology and RAD-020A Advanced Clinical Laboratory and RAD-021 Advanced Radiographic Anatomy.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce the structure of the atom, concepts of mechanics, electromagnetic radiation, electromagnetism, electrostatics, electric generators and motors. The production and control of high voltage rectifiers, and the components and principles of operation of the x-ray circuit are also included. Properties of x-rays, x-ray production, and x-ray interaction with matter are detailed. Performing calculations utilizing the English and metric systems are covered. (CSU)

**RAD 023 Positioning and Technical Laboratory Units 0.5**

*Prerequisites:* RAD-013 Principles of Radiographic Technique each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce the practical application of technical exposure calculations, accessory equipment, positioning techniques, and radiation protection procedures. (CSU)

**RAD 030 Intermediate Positioning and Technical Laboratory** **Units 0.5**

*Prerequisites:* RAD-023 Positioning and Technical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to explore the practical application of technical exposure calculations, accessory equipment, positioning techniques, and radiation protection at the intermediate level. The student learns how to identify and obtain radiographs of optimal quality. (CSU)

**RAD 030A Senior Clinical Laboratory** **Units 5**

*Prerequisites:* RAD-020A Advanced Clinical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital. and.

*Advisories:* None.

This course is designed to provide clinical training in radiographic procedures under direct or general supervision. The course includes rotation through surgery magnetic resonance imaging (MRI), ultrasound, mammography, computed tomography (CT), nuclear medicine, special procedures, radiation therapy, and general radiography. (CSU)

**RAD 030B Advanced Senior Clinical Laboratory** **Units 10**

*Prerequisites:* RAD-030A Senior Clinical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to provide advanced clinical training in radiographic procedures. The student obtains experience in a surgical setting with axial tomography, ultrasound, mammography, computed tomography (CT), nuclear medicine, special procedures, radiation therapy, and general radiography. (CSU)

**RAD 031 Advanced Positioning and Technical Laboratory** **Units 1**

*Prerequisites:* RAD-030 Intermediate Positioning and Technical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to introduce the application of test tools used for quality control in routine radiography, fluoroscopy, and for determining radiation exposure doses. Emphasis is placed on the utilization of techniques which limit radiation dosage to the patient. (CSU)

**RAD 032 Sectional Anatomy** **Units 2**

*Prerequisites:* RAD-021 Advanced Radiographic Anatomy each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to provide student with an understanding of anatomy in three dimensions. Transverse, sagittal, and coronal sections of anatomy are discussed, along with dimensional relationships. Utilizing examination examples of magnetic resonance imaging (MRI), computed tomography (CT), and ultrasound, each region of the body is studied. The student gains an understanding of disease process and abnormal pathology as presented in three dimensions. (CSU)

**RAD 040 Senior Review, Adv. Radiation Protection, & Fluoroscopic Systems** **Units 6**

*Prerequisites:* RAD 10 with a grade of "C" or better.

*Limitations on Enrollment:* Admission to the Radiologic Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed for advanced student qualifying for graduation from a 24-month program. The course includes formal instruction in radiation protection, specifically California Code of Regulations Title 17, Public Health, and the standards of the National Council on Radiation protection (NCRP). In preparation for the state and national examinations, a comprehensive review of materials covered throughout the two-year period is included with additional information on imaging equipment and innovative technology. (CSU)

**RAD 040A Radiographic Laboratory** **Units 9**

*Prerequisites:* RAD-030B Advanced Senior Clinical Laboratory each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to continue the practical training in radiographic procedures under general supervision with emphasis on perfecting all radiologic examination techniques. Further exposure to angiographic procedures and specialized fluoroscopic examinations is included as well as rotations through computed tomography (CT), ultrasound, nuclear medicine, and magnetic resonance imaging (MRI). (CSU)

**RAD 041 Radiographic Pathology and Film Critique** **Units 3**

*Prerequisites:* RAD-032 Sectional Anatomy each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* Admission to the Radiological Technology Program due to contractual agreement with hospital.

*Advisories:* None.

This course is designed to provide an overview of human pathologies. The student identifies changes that occur with disease and injury and their application to radiologic Technology. The student gains an understanding of these disease processes in order to handle seriously ill or injured patients by selecting positions and technical factors which produce quality diagnostic radiographs. (CSU)

## READING

### READING 069V Internship: Reading Units 1-8

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the reading internship. The student must enroll in a minimum of 7 units during the fall or spring semesters including internship units. For summer session, the student must enroll in one related course in addition to internship. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of internship program objectives and an employer internship agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the student participating in an occupational internship in reading. Application of discipline-related skills and knowledge of tutoring basic skills and thinking skills Secretaries Commission on Achieving Necessary Skills (SCANS) competencies is emphasized. Each student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college internship instructor. (CSU)

### READING 090 Introduction to Reading and Writing Skills Units 4

*Prerequisites: Concurrent enrollment in READING 98.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading through intensive work in word attack, comprehension, vocabulary, and study skills. This course meets the Level I reading requirement and may be repeated three times. Units earned in this course do not count toward an associate degree.

### READING 091A Reading in Literature Units 4

*Prerequisites: None.*

*Limitation on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building background knowledge in the subject area of literature. The student learns to use comprehension techniques and becomes acquainted with the basic concepts and vocabulary needed for an introductory course in literature. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward the associate degree.

### READING 091B Reading in Health Science Units 4

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building background knowledge in the subject area of health science. The student learns to use comprehension techniques and becomes acquainted with the basic concepts and vocabulary needed for an introductory course in health science. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward the associate degree.

### READING 091C Reading in Science Units 4

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building background knowledge in the subject area of science. The student learns to use comprehension techniques and becomes acquainted with the basic concepts and vocabulary needed for an introductory course in physical science. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward the associate degree.

### READING 091D Reading in World Geography and Culture Units 4

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building background knowledge in the subject area of world geography and culture. The student learns to use comprehension techniques and becomes acquainted with the basic concepts and vocabulary needed for an introductory course in world geography and culture. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward the associate degree.

### READING 091E Reading in History Units 4

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building background knowledge in the subject area of history. The student learns to use comprehension techniques and becomes acquainted with the basic concepts and vocabulary needed for an introductory course in history. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward the associate degree.

### READING 091F Reading in Children's Literature Units 4

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve reading comprehension while building knowledge of the literature written for children. The student learns to use comprehension techniques and becomes acquainted with a variety of forms of literature written for children. Successful completion of four of the six READING 91 (A-F) courses is equivalent to Reading level II. Units earned in this course do not count toward an associate degree.

### READING 092 Reading and Writing for Personal Growth and Career Success Units 6

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce the student to the reading and writing techniques needed for success in the work world. The student learns techniques for comprehending textbooks and other reading material, studying vocabulary specific to a field of study, and writing paragraphs and reports. Units earned in this course do not count toward an associate degree.

**READING 094A Critical Reading for  
College English****Units 3***Prerequisites: None.**Prerequisite Skills: None.**Corequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to help students improve their critical reading skills in preparation for college-level English. Particular emphasis is placed on preparing students for the reading component of English 1A. Students will be introduced to multiple critical reading strategies through readings in fiction, academic essays, and rhetorical prose. Successful completion of Reading 94A satisfies the Level III reading prerequisite for English 1A. Reading 94A and English 1A may be taken concurrently.

**READING 095 Reading and Writing  
Techniques****Units 4***Prerequisites: Reading level II.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide practice in academic reading and writing techniques. The student learns techniques for comprehending textbooks and other college level reading material, writing summaries and responses, writing an essay, and learning vocabulary specific to a field of study.

**READING 097A Textbook Reading and Study  
Strategies****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to assist the student in applying reading and study strategies to a textbook from another course. Units earned in this course do not count toward an associate degree.

**READING 097B College Research Strategies****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed as an authentic experience in college level research. Through a study of the life of a famous person, the student learns the notetaking, research, and presentation skills needed for college courses. Units earned in this course do not count toward an associate degree.

**READING 097C The Research Paper****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student who needs assistance in applying reading and writing research techniques to an assigned research paper from another course. Units earned in this course do not count toward an associate degree.

**READING 097D Summary Writing****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer techniques and practice in writing summaries of articles from journals and other publications. Units earned in this course do not count toward an associate degree.

**READING 097E Vocabulary Enrichment****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student who wishes to enrich his/her vocabulary for career and academic purposes. A variety of strategies are taught to enhance the student's ability to understand and retain new vocabulary words. Units earned in this course do not count toward an associate degree.

**READING 097F Basic Grammar for Writing  
and Speaking****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to offer practice in the basic conventions of grammar within the context of reading and writing assignments. Units earned in this course do not count toward an associate degree.

**READING 097G Spelling****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to help the student improve spelling skills by using sight words he/she already recognizes to spell polysyllabic words. Units earned in this course do not count toward an associate degree.

**READING 097H Reading Literature****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the student who wishes to expand his/her understanding of literature through group discussions. The student reads, discusses, and analyzes a broad range of literature in preparation for literature courses. Units earned in this course do not count toward an associate degree.

**READING 097I Conversations and Idioms for Non-  
Native Speakers****Units 1***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed for the non-native speaker who wants practice in using American expressions. The student learns to use and understand idiomatic expressions through literature and discussion groups. Units earned in this course do not count toward an associate degree.

**READING 098 Individualized Reading  
Skills****Units 0.5-2***Prerequisites: None.**Limitations on Enrollment: None.**Advisories: None.*

This course is designed to provide individualized, self-paced, and/or small group instruction in reading and learning skills ranging from word attack skills through critical reading. The course meets the level I reading requirement. Units earned in this course do not count toward an associate degree.

## RELIGION

### RELGN 014A Great Religions of the Eastern World Units 3

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a survey of the historical development and essential beliefs of the major religions of the Eastern world. Primary emphasis is on the major phases of development and comparative insights among the great religions of the world. Course work consists of readings, lectures, and discussions in Hinduism, Buddhism, Jainism, Confucianism, and Taoism. (UC, CSU)

### RELGN 014B Great Religions of the Western World Units 3

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a survey of the historical development and essential beliefs of the major religions of the Western world. Primary emphasis is on the major phases of development and comparative insights among the great religions of the world. Course work consists of readings, lectures, and discussions in the areas of ancient religious beliefs, Mesopotamian religions, Graeco-Roman religions, Teutonic religion, Zoroastrianism, Judaism, Christianity, and Islam. (UC, CSU)

### RELGN 075 Selected Topics: Religion Units 0.5-3

*Prerequisites:* None; exempt from assessment testing.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of religion not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## RUSSIAN

### RUSS 051 Elementary Russian Units 2.5

*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an introduction to the Russian language and Russian culture. Emphasis is placed on the following skills: listening, speaking, reading, and writing. The combined five units of RUSS 51 and 52 are equivalent to RUSS 1. (UC, CSU)

### RUSS 052 Elementary Russian Units 2.5

*Prerequisites:* RUSS-051 Elementary Russian each with a grade of "C" or better.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an introduction to the Russian language and Russian culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of RUSS 51 and 52 are equivalent to RUSS 1. (UC, CSU)

### RUSS 053 Elementary Russian Units 2.5

*Prerequisites:* RUSS-052 Elementary Russian each with a grade of "C" or better.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an introduction to the Russian language and Russian culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, writing. The combined five units of RUSS 53 and 54 are equivalent to RUSS 2. (UC, CSU)

### RUSS 054 Elementary Russian Units 2.5

*Prerequisites:* RUSS-053 Elementary Russian each with a grade of "C" or better.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an introduction to the Russian language and Russian culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of RUSS 53 and 54 are equivalent to RUSS 2. (UC, CSU)

### RUSS 075 Selected Topics: Russian Units 0.5-3

*Prerequisites:* None.  
*Prerequisite Skills:* None, exempt from assessment testing..  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of Russian not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## SIGN LANGUAGE

### SL 001 Elementary American Sign Language Units 3

*Prerequisites:* Reading level II.  
*Limitations on Enrollment:* None.  
*Advisories:* SL 071, Elementary American Sign Language Laboratory.

This is a beginning course in a series of four in American Sign Language and Deaf Culture. Emphasis is placed on receptive and expressive skills respectively. (UC, CSU)

### SL 002 Elementary American Sign Language Units 3

*Prerequisites:* SL 001 with a grade of "C" or better.  
*Limitations on Enrollment:* None.  
*Advisories:* SP 072, Elementary American Sign Language Laboratory.

This is the second in a series of four courses in American Sign Language and Deaf Culture. Emphasis is placed on receptive and expressive skills respectively. (UC, CSU)

### SL 003 Intermediate American Sign Language Units 3

*Prerequisites:* SL 002 with a grade of "C" or better.  
*Limitations on Enrollment:* None.  
*Advisories:* SL 073, Intermediate American Sign Language Laboratory.

This course is the third in a series of four courses in American Sign Language and Deaf Culture. Emphasis is on improving speed and fluency. (UC, CSU)

**SL 004 Intermediate American Sign Language Units 3**

*Prerequisites:* SL 003, *Intermediate American Sign Language, with a grade of "C" or better.*

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is the last in a series of four courses in American Sign Language and Deaf Culture. Emphasis is on improving speed and fluency. (UC, CSU)

**SL 071 Elementary American Sign Language Laboratory Units 0.5-1**

*Prerequisites:* SL 001 with a grade of "C" or better.

*Corequisites:* Concurrent enrollment in SL 001.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to reinforce and expand American Sign Language (ASL) skills in a laboratory setting. Emphasis is placed on fingerspelling, numbers, conversational regulators, basic American Sign Language vocabulary, and basic American Sign Language communication skills. This course may be taken for up to two (2) units.

**SL 072 Elementary American Sign Language Laboratory Units 0.5-1**

*Prerequisites:* SL 071 and SL 002 both with a grade of "C" or better.

*Corequisites:* Concurrent enrollment in SL 002.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to reinforce and expand American Sign Language (ASL) skills. In a laboratory setting,

**SL 073 Intermediate American Sign Language Laboratory Units 0.5-1**

*Prerequisites:* SL 072 and SL 003 both with a grade of "C" or better.

*Corequisites:* Concurrent enrollment in SL 003.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to reinforce and expand American Sign Language (ASL) skills. In a laboratory setting, emphasis is placed on fingerspelling, numbers, conversational regulators, intermediate American Sign Language vocabulary, and specific American Sign Language grammatical structure at an intermediate level. This course may be taken for up to two (2) units.

**SL 074 Intermediate American Sign Language Laboratory Units 0.5-1**

*Prerequisites:* SL 073 and SL 004 both with a grade of "C" or better. *Corequisites:* Concurrent enrollment in SL 004.

*Limitations on Enrollment:* None.

*Advisories:* None.

This is a course designed to reinforce and expand American Sign Language (ASL) skills. In a laboratory setting, emphasis is placed on fingerspelling, numbers, conversational regulators, intermediate American Sign Language vocabulary, and specific American Sign Language grammatical structure at an intermediate level. This course may be taken for up to two (2) units.

## SMALL ENGINE MECHANICS

**SM ENG 030C Industrial Equipment: Electrical and Electronic Systems Units 5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to instruct the student to analyze and repair electrical problems found on industrial and commercial engines and equipment. (CSU)

**SM ENG 030D Industrial Equipment: Power Trains Units 5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce specialized applications, drive trains, clutches, transmissions, and final drives. The student also writes work orders, develop parts lists, and works with customers. (CSU)

**SM ENG 066 Compact Diesel Engines Units 2.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an explanation of the design, operation, and proper maintenance of the latest compact diesel engines approved by the California Air Resources Board (CARB) for operation and sales in California after 1997. Topics include fuel characteristics, current emissions testing and standards, related engine systems, operation, and trouble-shooting. Problem-solving component failures and disassembly/assembly of a representative engine is included. Upon successful completion of this course the student is prepared to take the Outdoor Power Equipment Certification (OPEC) test. (CSU)

## SOCIAL SCIENCE

**SOCSC 015 Selected Topics: Social Science Units 1-2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This topics course is designed to offer instruction in one of the specialized areas of social science not already covered by the existing curriculum. (CSU)

**SOCSC 030 American Immigrant Experience Units 3**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the immigrant experience in the United States. The course provides a theoretical framework for the study of minority groups, examines the experiences of various racial and ethnic groups in the United States over time, and evaluates immigration policies. A historical overview of minority relations demonstrates the prevalence of ethnic diversity in the United States. (UC, CSU)

**SOCSC 075 Selected Topics: Social Science Units 0.5-3**

*Prerequisites: None; exempt from assessment testing.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of social science not covered by the existing curriculum. Units in this course do not count toward an associate degree.

**SOCSC 099V Work Experience: Social Science Units 1**

*Prerequisites: Students must be enrolled in at least three units of class work, of which at least one course and also employment, must be related to major field of study.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to give the student college credit for on-the-job experience related to the major study field. The student must demonstrate new and expanded learning experiences before being permitted to repeat. To register, complete an application form available at the Applied Science and Technology Division Office, Holt 140. This course may be repeated three times in sequence except for summer school alternate plan.

## SOCIOLOGY

**SOCIO 001A Introduction to Sociology Units 3**

*Prerequisites: Reading level II.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to examine how social forces affect human behavior. The student classifies, discusses, and analyzes the major social forces such as socialization, culture, class inequality and differences, ethnic and racial relations, sex and gender, sexual orientation, age and aging, disabilities, economic and political institutions, education, family, religion, deviance, and social change. (UC, CSU, CAN SOC 2)

**SOCIO 001B Problems of A Changing Society Units 3**

*Prerequisites: Reading level II.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to focus attention on the social problems which grow out of rapid social and cultural change. Among topics considered are family disorganization, economic insecurity, juvenile delinquency and adult criminality, physical and mental ill health, racial discrimination, international tensions, and education. (UC, CSU, CAN SOC 4)

**SOCIO 005 Sociology of the Family Units 3**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to address the sociology of family and the social processes of family organization. Topics in the course include the diverse forms of the family found worldwide, family connections to the economy, marriage and divorce trends, myths about the declining family and "family values," and the realities of families living in poverty. The course examines the social, economic, gendered, and racial experiences of families in the U.S. The main goal of the course is to develop a sociological understanding of family as a social institution. (CSU)

**SOCIO 015 Selected Topics: Sociology Units 0.5-2**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to offer instruction in one of the specialized areas of sociology not already covered by existing curricula. (CSU)

**SOCIO 024 Social Welfare Units 3**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to explore the origin and development of the religious, political, economic, social, and historical forces which have contributed to the emergence of social welfare as an institution in America. It is intended for the social worker major or those with particular interest in social welfare. (UC, CSU)

**SOCIO 027 Gender in Contemporary Society Units 3**

*Prerequisites: Reading level II.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to examine changing sex roles in contemporary society, with a special emphasis on gender in the United States. The context of a historical and comparative analysis of men and women's varying roles, statuses, and life chances is explored. Social problems, such as domestic violence, economic and social discrimination, are also examined. This course also addresses the feminist movement, the men's movement and the conservative backlash to feminism. (UC, CSU)

**SOCIO 033 Social Inequality in the United States Units 3**

*Prerequisites: Reading level II.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to examine social inequality and stratification from a theoretical and comparative perspective, but with an emphasis on the United States. The student discusses and analyzes types of inequality, such as age and gender inequality, and types of stratification, including racial, ethnic, and class stratification. The experiences of many racial and ethnic groups are addressed, including African-Americans, Asian-Americans, Latinos, Native Americans, and Americans of European descent. (UC, CSU)

**SOCIO 045A Beginning Field Practicum Units 2**

*Prerequisites: Reading level II; completion of or concurrent enrollment in PSYCH 1 or SOCIO 1A.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide an opportunity for the student to have on-the-job learning experiences in human service agencies. The student observes professional staff working with clients in public agencies. One hour in class is required each week to integrate practical experiences with theory learned in sociology courses. (CSU)

**SOCIO 045B Intermediate Field Practicum Units 2**

*Prerequisites: Completion of or concurrent enrollment in PSYCH 1 or SOCIO 1A.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide an opportunity for the student to have guided experiences in human service agencies. The student observes professional staff working with clients in public agencies and engages in supervised internship at a social service agency. One hour in class is required each week to integrate practical experiences with theory learned in psychology and sociology courses. (CSU)

**SOCIO 050H Special Studies: Sociology Units 1-2**

*Prerequisites:* Presentation of a project acceptable to the instructor and the division chairperson; SOCIO 1A or 1B with a grade of "B" or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to allow the qualified student to do advanced work in the field. The course includes research, directed reading, field work, or other advanced study. The course may be repeated for a maximum total of four units. (CSU)

**SOCIO 075 Selected Topics: Sociology Units 0.5-3**

*Prerequisites:* None; exempt from assessment testing.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of sociology not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## SPANISH

**SPAN 001 Elementary Spanish Units 5**

*Prerequisites:* None.

*Prerequisite Skills:* 1. Reading level II.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish cultures/area studies. Emphasis is placed on communication skills (listening, speaking, reading and writing) and cultural understanding (behaviors, institutions, perspectives and artistic manifestations). (UC, CSU, CAN SPAN 2, CAN SPAN SEQ A with both SPAN 1 and 2)

**SPAN 001A Spanish for Fluent Speakers Units 5**

*Prerequisites:* None.

This course is designed for students who have never studied Spanish formally, but who speak fluently and are able to use various language strategies to express themselves in Spanish without resorting to English. The course will place a strong emphasis on learning the verb system, reading, writing, and vocabulary building. Course is conducted in Spanish. (UC, CSU)

**SPAN 002 Elementary Spanish Units 5**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-052 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish cultures/area studies. Emphasis is placed on communication skills (listening, speaking, reading and writing) and cultural understanding (behaviors, institutions, perspectives and artistic manifestations). (UC, CSU, CAN SPAN 4, CAN SPAN SEQ A with both SPAN 1 and 2)

**SPAN 002A Spanish for Fluent Speakers Units 5**

*Prerequisites:* Successful completion of SPAN 001A

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a continuation of Spanish for Fluent Speakers 001A designed for students who already communicate in Spanish and who want to develop and strengthen reading and writing skills with special emphasis on vocabulary expansion, proper grammatical usage, cultural and literary applications of the Spanish language. Course is conducted in Spanish. (UC, CSU)

**SPAN 003 Intermediate Spanish Units 5**

*Prerequisites:* SPAN-002 Elementary Spanish each with a grade of "C" or better or SPAN-054 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer continued study of the Spanish language and Spanish cultures/area studies. Emphasis is placed on communication skills (listening, speaking, reading and writing) and cultural understanding (behaviors, institutions, perspectives and artistic manifestations). Efforts to improve reading and composition skills are based on both contemporary and traditional selection of literary texts. (UC, CSU, CAN SPAN 8, CAN SPAN SEQ B with both SPAN 3 and 4)

**SPAN 004 Intermediate Spanish Units 5**

*Prerequisites:* SPAN-003 Intermediate Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer continued study of the Spanish language and Spanish cultures/area studies. Emphasis is placed on communication skills (listening, speaking, reading and writing) and cultural understanding (behaviors, institutions, perspectives and artistic manifestations). Efforts to improve reading and composition skills are based on both contemporary and traditional selection of literary texts. (UC, CSU, CAN SPAN 10, CAN SPAN SEQ B with both SPAN 3 and 4)

**SPAN 005 Advanced Spanish Units 5**

*Prerequisites:* SPAN 004, Intermediate Spanish, or SPAN 002A, Spanish for Fluent Speakers, with a grade of "C" or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide students with a more detailed study of grammatical concepts, refinement of vocabulary and further practice in composition at a more advanced level. Students will continue studying literature, culture, and civilization. (UC, CSU)

**SPAN 006 Advanced Spanish Units 5**

*Prerequisites:* SPAN 005, Advanced Spanish, with a grade of "C" or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a continuation of SPAN 005. The course focuses on the development of advanced writing skills, with emphasis on how to write argumentative prose, essays, and research papers. Students will continue studying literature, culture, and civilization. (UC, CSU)

**SPAN 010 Basic Everyday Spanish Units 3**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to develop beginning communication strategies and vocabulary as well as basic oral and written comprehension in everyday situations. The emphasis is mainly on spoken Spanish. (CSU)

**SPAN 030 Conversational Spanish: Discussions on Hispanic Cinema Units 3**

*Prerequisites:* SPAN 1.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide intensive practice in the spoken language with the objective of developing oral fluency and cultural awareness through the discussion of Hispanic cinema. The student views and discusses Hispanic films from the early twentieth century to the present. The course analyzes movies as cultural artifacts and pays special attention to the relationship between cinema and the historical circumstances that surround its production. (CSU)

**SPAN 036A Introductory Spanish Conversation Units 2**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-051 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to strengthen fundamental communication patterns based on typical daily situations. (CSU)

**SPAN 036B Beginning Spanish Conversation Units 2**

*Prerequisites:* SPAN-002 Elementary Spanish each with a grade of "C" or better or SPAN-053 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to achieve conversational ability based on typical daily situations. (CSU)

**SPAN 038A Special Assignment: Listening Units 2**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-051 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a skill-building course with an emphasis on listening. The course is designed to meet the special need of the student. The course is offered for individual or group study. (CSU)

**SPAN 038B Special Assignment: Pronunciation Units 2**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-051 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a skill-building course with an emphasis on pronunciation. The course is designed to meet the special need of the student. The course is offered for individual or group study. (CSU)

**SPAN 038C Special Assignment: Reading Units 2**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-051 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a skill-building course with an emphasis on reading. The course is designed to meet the special need of the student. The course is offered for individual or group study. (CSU)

**SPAN 038D Special Assignment: Writing Units 2**

*Prerequisites:* SPAN-001 Elementary Spanish each with a grade of "C" or better or SPAN-051 Elementary Spanish each with a grade of "C" or better.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is a skill-building course with an emphasis on writing. The course is designed to meet the special need of the student. The course is offered for individual or group study. (CSU)

**SPAN 050H Special Studies: Spanish Units 1-2**

*Prerequisites:* SPAN-004 Intermediate Spanish each with a grade of "B" or better.

*Prerequisite Skills:* 1. Presentation of a project acceptable to the instructor and the division chairperson..

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to allow the student to do advanced work in the language. The course includes research, directed reading, field work, or other advanced study. The course may be repeated for a maximum total of 4 units. (CSU)

**SPAN 051 Elementary Spanish Units 2.5**

*Prerequisites:* Reading level II.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, reading, and writing. The combined five units of SPAN 51 and 52 are equivalent to SPAN 1. (UC, CSU, CAN SPAN 2 with both SPAN 51 and 52, CAN SPAN SEQ A with SPAN 51, 52, 53, and 54)

**SPAN 052 Elementary Spanish Units 2.5**

*Prerequisites:* Successful completion of SPAN 51 with a grade of "C" or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of SPAN 51 and 2 are equivalent to SPAN 1. (UC, CSU, CAN SPAN 2 with both SPAN 51 and 52, CAN SPAN SEQ A with SPAN 51, 52, 53, and 54)

**SPAN 053 Elementary Spanish Units 2.5**

*Prerequisites:* Successful completion of SPAN 1 or SPAN 52 with a grade of “C” or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of SPAN 53 and 54 are equivalent to SPAN 2. (UC, CSU, CAN SPAN 4, CAN SPAN SEQ A with SPAN 51, 52, 53, and 54)

**SPAN 054 Elementary Spanish Units 2.5**

*Prerequisites:* Successful completion of SPAN 53 with a grade of “C” or better.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is an introduction to the Spanish language and Spanish culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of SPAN 53 and 54 are equivalent to SPAN 2. (UC, CSU, CAN SPAN 4 with both SPAN 53 and 54, CAN SPAN SEQ A with SPAN 51, 52, 53, and 54)

**SPAN 071 Spanish in the Workplace Units 2**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide a basic knowledge of Spanish to facilitate the student’s success in the workplace. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. Vocabulary content varies according to the student’s needs in the workplace. Units earned in this course do not count toward the associate degree.

**SPAN 075 Selected Topics: Spanish Units 0.5-3**

*Prerequisites:* None; exempt from assessment testing.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of Spanish not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## SPECIAL EDUCATION

**SP ED 015 Selected Topics: Special Education Units 1-4**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to present selected topics dealing with various aspects of special education which are not addressed by the existing college curriculum. Topics include such areas as careers in special education, concepts related to reasonable accommodation, and the implications of disability in various work and educational environments. (CSU)

**SP ED 071 Fundamental Number Sense Units 1.5**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide the competencies that precede the acquisition of arithmetical skills. Units earned in this course do not count toward an associate degree.

**SP ED 075 Assisting the Student With Disabilities Units 1**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed as an introduction and orientation for the student interested in working with disabled students at San Joaquin Delta College. The course provides an overview of the following information: pertinent laws; campus support services, Disabled Students Programs and Services (DSPS), understanding of a variety of disabling conditions requiring assistance on campus, and skills and best practices necessary for the student to effectively assist other students on campus who have disabilities. Units in this course do not apply toward the associate degree.

**SP ED 076 Special Topics in Special Education Units 0.5-4**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to offer instruction in one or more of the specialized areas of special education not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

**SP ED 078 Special Education Mathematics Laboratory Units 0.5**

*Prerequisites:* None; enrolled in DV ED 86, MATH 88, MATH 80, MATH 83A/83B, MATH 82, MATH 84A/84B, or MATH 12/PSYCH 12.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to provide assistance to the student enrolled in mathematics who has special learning needs due to visual impairment. Units in this course do not count toward an associate degree.

**SP ED 082 Computer Access Evaluation for the Student with Disabilities Units 0.5**

*Prerequisites:* None.

*Prerequisite Skills:* None.

*Corequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed for the student with a physical disability, sensory impairment and/or learning disability that require(s) adapted technology to access a computer. The course provides individualized assessment of each student’s skills and disability to be adapted to the appropriate technology such as adapted keyboards, text and image magnification, voice recognition applications, computer screen readers, etc. Units earned in this course do not apply to the associate degree.

**SP ED 083 Introduction to Kurzweil 1000 Units 1**

*Prerequisites:* None.

*Limitations on Enrollment:* None.

*Advisories:* None.

This course is designed to introduce the student who is legally blind to a scanner and computer-based reading system using a speech synthesizer. Units earned in this course do not apply to the associate degree.

**SP ED 084A Word Processing with a Screen Reader Application Units 2**

*Prerequisites:* SP ED 85A with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed for the student who requires non-visual and/or auditory access to computer information. The student uses a screen reader application to navigate a Windows environment and Internet sites. Units in this course do not apply to the associate degree.

**SP ED 084B Word Processing with a Screen Reader Application Units 2**

*Prerequisites:* SP ED 84A with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a beginning level course in word processing using a screen reader application for the student who requires a non-visual and/or auditory access to computer information. The course expands and builds upon the skills developed in SP ED 84A, Beginning Screen Reader Application. Units in this course do not apply towards the associate degree.

**SP ED 085A Introduction to Adapted Keyboarding Units 1**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce basic computer keyboarding skills using adaptive computer technology for the student with physical, communication, and learning disabilities. The course focuses on developing familiarity with the keyboard and touch typing skills for the alphabetic keys at an introductory level. The course includes assessment of individual abilities and prescriptive adaptive software/hardware for maximum success. Units in this course do not apply toward an associate degree.

**SP ED 085B Beginning Adapted Keyboarding Units 1**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is a beginning-level course in adaptive computer keyboarding. The course focuses on expanding and refining keyboard skills for the student with physical, communication, and learning disabilities using adaptive computer technology. This course expands and builds upon the skills developed in SP ED 85A, Introduction to Adapted Keyboarding. Units in this course do not apply toward an associate degree.

**SP ED 085C Intermediate Adapted Keyboarding Units 1**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is an intermediate-level course in adaptive computer keyboarding. The course focuses on expanding and refining keyboard skills for the student with physical, communication and learning disabilities using adaptive computer technology. This course expands and builds upon the skills developed in SP ED 85B, “Beginning Adapted Keyboarding.” Units in this course do not apply toward an associate degree.

**SP ED 086 Introduction to Adapted Word Processing Units 1**

*Prerequisites:* SP ED 85A with a grade of “C” or better.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to introduce basic concepts and operation of word processing software using adaptive computer technology for the student with physical, communication, and/or learning disabilities. The course focuses on developing familiarity with the skills necessary to create, save, retrieve, edit, format and print documents. The course includes assessment of individual abilities and prescriptive adaptive software/hardware for maximum success. Units in this course do not apply toward the associate degree.

**SP ED 087A Screen Reader Application Units 2**

*Prerequisites:* None.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to improve reading skills by the use of computer-based screen readers. The student uses a screen reader application to read electronic text and navigate those environments. The student will read various types of reading materials, including fiction, non-fiction, magazine articles, and Internet based materials. It is designed for but not limited to students with disabilities. This is a stand alone course and not for any program or degree.

**SP ED 087B Screen Reader Application - Section B Units 2**

*Prerequisites:* SP ED-087A Screen Reader Application each with a grade of “C” or better and.  
*Prerequisite Skills:* None.  
*Corequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* SP ED-084A each with a grade of “C” or better and CS-070 each with a grade of “C” or better and SP ED-086 each with a grade of “C” or better.

This course is designed to improve reading skills by the use of computer-based screen readers. The student uses a screen reader application to read electronic text and navigate those environments. The student will read various types of reading materials, including fiction, non-fiction, magazine articles, and Internet based materials. The student will also learn how to find electronic text materials on the Internet, online libraries, and create their own electronic text from printed text materials. This is a stand alone course and not proposed for any program or degree.

**SP ED 120 Tutorial Assistance Units 0**

*Prerequisites:* None.  
*Limitations on Enrollment:* None.  
*Advisories:* None.

This course is designed to provide tutoring support for the student with special learning needs who is enrolled in regular classes. The course offers up to three hours per week of tutoring for each course in which a student is enrolled. Tutoring is provided with special attention to learning styles, study skills such as notetaking, textbook reading, and test-taking and computer access. The course goal is to help the student become a self-sufficient, independent learner which may include the use of adaptive equipment and/or computer technology.

**SP ED 122 Sign Language for Students  
With Special Needs Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide students with disabilities the skills needed to learn basic sign language. Emphasis will be placed on survival communication with deaf persons and interpreters.

**SP ED 125 Positive Parenting Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to improve parenting skills for the parent with developmental disabilities. Areas of study include parenting skills related to positive decision making, community resources, health care, and home and child safety.

**SP ED 130 Resource Awareness for Persons  
With Disabilities Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This non-credit course is designed to provide the student with developmental disabilities the skills necessary for semi-independent and independent living. Areas of study include human services, transportation, recreation, vocation, health, safety, and legal issues. A personal portfolio is established to organize documents and information.

**SP ED 133 Money Management for Persons  
With Disabilities Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This noncredit course is designed to provide the student with developmental disabilities the skills necessary for effective money management. Areas of study include currency and coins, shopping, restaurant billing and tips, budgeting, utility bills, and checking account(s).

**SP ED 144 Janitorial Technology Training Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This noncredit course is designed to provide the student with the necessary skills to work in the janitorial field. Emphasis is placed on the safe use of janitorial/cleaning equipment and cleaning chemicals.

**SP ED 145 Retail Skills Training Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This non-credit course is designed for the student with disabilities. The course provides the necessary skills to work in a retail sales environment. Training and instruction is community based. Emphasis is placed on customer relations, merchandising, cash handling, housekeeping standards, and cash register operations.

**SP ED 146 Office Technology Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to provide vocational training in basic office technology for students with disabilities. The curriculum is intended to be flexible and assist individuals in reaching their maximum abilities. To this end, the content and teaching methods are individually designed to meet the needs of the population served.

**SP ED 147A General Maintenance-Carpentry Units 0**

*Prerequisites: None.*

This course is designed to provide vocational training in basic carpentry for students with disabilities. The curriculum is intended to be flexible and assist individuals in reaching their maximum abilities. To this end, the content and teaching methods are individually designed to meet the needs of the population served.

**SP ED 147B General Maintenance-Plumbing Units 0**

*Prerequisites: None.*

This course is designed to provide vocational training in basic plumbing for students with disabilities. The curriculum is intended to be flexible and assist individuals in reaching their maximum abilities. To this end, the content and teaching methods are individually designed to meet the needs of the population served.

**SP ED 147C General Maintenance-Basic  
Wiring Units 0**

*Prerequisites: None.*

This course is designed to provide vocational training in basic wiring for students with disabilities. The curriculum is intended to be flexible and assist individuals in reaching their maximum abilities. To this end, the content and teaching methods are individually designed to meet the needs of the population served.

**SP ED 147D General Maintenance-Painting Units 0**

*Prerequisites: None.*

This course is designed to provide vocational training in basic painting for students with disabilities. The curriculum is intended to be flexible and assist individuals in reaching their maximum abilities. To this end, the content and teaching methods are individually designed to meet the needs of the population served.

**SP ED 151 Employment Readiness Training Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This non-credit course is designed for the student with disabilities. The course includes job applications, the interview process, creation of a resume, training and the support necessary for success on the job.

**SP ED 159 Health Education for Persons  
With Disabilities Units 0**

*Prerequisites: None. Limitations on Enrollment: None.*

*Advisories: None.*

This non-credit course is designed for the student with developmental disabilities. The course provides an overview of health related issues, including basic nutrition, weight control, exercise, sexually transmitted diseases, and hygiene. The course includes health risks associated with obesity, behavior modification techniques to improve healthy choices, and the importance of exercise and activity in health management.

**SP ED 195 Introduction to the Computer for  
Persons with Disabilities Units 0**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce a student with a disability to elementary concepts and fundamental skills required to operate a microcomputer for personal use. The student learns needed theory and techniques to: identify and manipulate screen objects; use mouse and keyboard commands; handle windows and dialog boxes; start and quit an application program; create and work with simple documents; improve the appearance of text; organize files and create folders on a disk; perform single trouble-shooting and maintenance techniques using adaptive technology and/or alternate mode of computer access.

## SPEECH

### SPCH 075 Selected Topics: Speech Units 0.5-3

*Prerequisites: None; exempt from assessment testing.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of speech not already covered by the existing curriculum. Units in this course do not count toward an associate degree.

## TAGALOG

### TAG 038A Special Assignment: Listening Units 2

*Prerequisites: TAG-051 Elementary Tagalog each with a grade of "C" or better or.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is skill-building with an emphasis on listening. The course is designed to meet the special need of the student. It is offered for individual or group study. (CSU)

### TAG 038B Special Assignment: Pronunciation Units 2

*Prerequisites: TAG-051 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is skill-building with an emphasis on pronunciation. The course is designed to meet the special need of the student. It is offered for individual or group study. (CSU)

### TAG 038C Special Assignment: Reading Units 2

*Prerequisites: TAG-051 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is a skill-building course with an emphasis on reading. The course is designed to meet the special need of the student. It is offered for individual or group study. (CSU)

### TAG 038D Special Assignment: Writing Units 1

*Prerequisites: TAG-051 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is a skill-building course with an emphasis on writing. The course is designed to meet the special need of the student. It is offered for individual or group study. (CSU)

### TAG 051 Elementary Tagalog Units 2.5

*Prerequisites: None.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is an introduction to the Tagalog language and culture. Emphasis is placed on the following skills: listening, speaking, reading, and writing. The combined five units of Elementary Tagalog 51 and Elementary Tagalog 52 are equivalent to a first semester Tagalog course. (UC, CSU)

### TAG 052 Elementary Tagalog Units 2.5

*Prerequisites: TAG-051 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is a study and practice in speaking, reading, and writing the language. Emphasis is placed on language, culture, and the following skills: listening, speaking, reading, and writing. The combined five units of Elementary Tagalog 51 and Elementary Tagalog 52 are equivalent to a first semester Tagalog course. (UC, CSU)

### TAG 053 Elementary Tagalog Units 2.5

*Prerequisites: TAG-052 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is designed to continue study and practice in the language and culture. Emphasis is placed on speech patterns and the following skills: listening, speaking, reading, and writing. The combined five units of Elementary Tagalog 53 and Elementary Tagalog 54 are equivalent to a second semester Tagalog course. (UC, CSU)

### TAG 054 Elementary Tagalog Units 2.5

*Prerequisites: TAG-053 Elementary Tagalog each with a grade of "C" or better.*  
*Prerequisite Skills: None.*  
*Corequisites: None.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is designed to continue study and practice in the language and culture. Emphasis is placed on speech patterns and the following skills: listening, speaking, reading, and writing. The combined five units of Elementary Tagalog 53 and Elementary Tagalog 54 are equivalent to a second semester Tagalog course. (UC, CSU)

### TAG 075 Selected Topics: Tagalog Units 0.5-3

*Prerequisites: None; exempt from assessment testing.*  
*Limitations on Enrollment: None.*  
*Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of Tagalog not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## VIETNAMESE

**VIET 051 Elementary Vietnamese Units 2.5**

*Prerequisites: None.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is an introduction to the Vietnamese language and Vietnamese culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of VIET 51 and 52 are equivalent to VIET 1. (UC, CSU)

**VIET 052 Elementary Vietnamese Units 2.5**

*Prerequisites: Successful completion of VIET 51 with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is an introduction to the Vietnamese language and Vietnamese culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of VIET 51 and 52 are equivalent to VIET 1. (UC, CSU)

**VIET 053 Elementary Vietnamese Units 2.5**

*Prerequisites: Successful completion of VIET 1 or 52 with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is an introduction to the Vietnamese language and Vietnamese culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of VIET 53 and 54 are equivalent to VIET 2. (UC, CSU)

**VIET 054 Elementary Vietnamese Units 2.5**

*Prerequisites: Successful completion of VIET 53 with a grade of "C" or better.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is an introduction to the Vietnamese language and Vietnamese culture. Emphasis is placed on the following skills in the order given: listening, speaking, reading, and writing. The combined five units of VIET 53 and 54 are equivalent to VIET 2. (UC, CSU)

**VIET 075 Selected Topics: Vietnamese Units 0.5-3**

*Prerequisites: None; exempt from assessment testing.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to offer instruction in one or more of the specialized areas of Vietnamese not covered by the existing curriculum. Units in this course do not count toward an associate degree.

## VOCATIONAL EDUCATION

**VO-ED 069V Internship: Vocational Education Units 1-8**

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the vocational education technology internship. The student must enroll in a minimum of 7 units during the semester including internship units. For summer session, the student must enroll in one related course in addition to internship. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of internship program objectives and an employer internship agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the student participating in an occupational internship in vocational education technology. Application of discipline-related skills and knowledge of the Secretaries' Commission on Achieving Necessary Skills (SCANS) competencies is emphasized. Each student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college internship instructor. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140. (CSU)

**VO-ED 080V Work Experience: Apprenticeship Units 1-8**

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the vocational education experience. The student must enroll in a minimum of 7 units during the semester including work experience units. For summer session, the student must enroll in one related course in addition to work experience. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of work experience program objectives and an employer work experience agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the indentured apprentice. The course objectives are developed by the students in consultation with his or her supervisor. The student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college work experience instructor. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140.

**VO-ED 090V Work Experience: Vocational Education Units 1-8**

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the vocational education experience. The student must enroll in a minimum of 7 units during the semester including work experience units. For summer session, the student must enroll in one related course in addition to work experience. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of work experience program objectives and an employer work experience agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed for the student employed in a career area. The course objectives are developed by the students in consultation with his or her supervisor. The student is engaged in a specific research project or on-the-job learning activities under the supervision of a worksite supervisor and a college work experience instructor. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140.

**VO-ED 096V Work Experience: General Units 1-3**

*Prerequisites: None.*

*Limitations on Enrollment: The student must enroll in a course that is directly related to the vocational education experience. The student must enroll in a minimum of 7 units during the semester including work experience units. For summer session, the student must enroll in one related course in addition to work experience. The combined total number of units a student may take in internship, work experience, and occupational practice may not exceed a maximum of 16 units. Participation requires submission and approval of work experience program objectives and an employer work experience agreement.*

*Advisories: GUID 30, 31, 32, 33.*

This course is designed to award college credit for the student working on campus and enrolled in a course that directly relates to his or her job. The student works for faculty members in offices, the library, laboratories, shops, or gymnasiums. To register, complete an application form available at the Applied Science and Technology Division office, Holt 140.

## VOCATIONAL NURSING

**VOC NUR 001 Foundations of Nursing Units 8.5**

*Prerequisites: BIOL 31 or BIOL 33 or BIOL 11; HS 36; HS/FCS 19; PSYCH 1; a grade of "C" or better in each prerequisite course with a minimum GPA of 2.5 from prerequisite courses is required.*

*Limitations on Enrollment: Admission to the Vocational Nursing.*

*Advisories: None.*

This course is designed to introduce the student to the fundamental issues and trends in nursing focusing on the collaborative roles of the Registered Nurse, Licensed Vocational Nurse, Psychiatric Technician and the Certified Nurse Assistant. Included in the content are the basic concepts of anatomy and physiology, the mechanisms of disease, and the sciences of nutrition and pharmacology. Wholism is introduced as the theoretical framework used by the student in identification of patient needs. The clinical component of the course focuses on care of the geriatric client. (CSU)

**VOC NUR 002 Introduction to Medical and Surgical Nursing Units 8.5**

*Prerequisites: Admission to Vocational Nursing Program; VOC NUR 1.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce the student to the nursing care of patients with common medical-surgical disorders of the cardiovascular, respiratory, and endocrine systems and that of the special senses. The clinical focus of this course is nursing care of adult patients with an uncomplicated course of treatment utilizing the concept of wholism. The student is introduced to principles of asepsis as applied to pre-operative and post-operative patient management. Psychiatric technicians may be able to have this course waived. (CSU)

**VOC NUR 003 Obstetrical Nursing Units 3.5**

*Prerequisites: VOC NUR 2.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to prepare the vocational nursing student for the role of providing care to low-risk and high-risk childbearing families. The theoretical framework of wholism is utilized for identification of biological, psychological, sociological, cultural, and spiritual family needs. The nursing process is utilized for the planning and implementation of care. Fundamental issues, trends and the role of the vocational nurse in childbearing nursing are addressed. (CSU)

**VOC NUR 004 Pediatric Nursing Units 3.5**

*Prerequisites: VOC NUR 2.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce the vocational nursing student to the fundamental issues and trends in pediatric nursing. The theoretical framework of wholism is applied in analyzing patient and family needs and the biological, psychological, sociological, cultural, and spiritual factors that may affect their interaction with the environment. Threaded throughout the course is a strong emphasis on growth and developmental changes that occur in the pediatric population. In addition to the maintenance of the well child, the student is introduced to familial influences on child health promotion, the mechanisms of disease, nutrition, and pharmacology. (CSU)

**VOC NUR 005 Intermediate Medical/Surgical Nursing Units 9**

*Prerequisites: VOC NUR 4.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to introduce the student to the care of common disorders affecting the neurological, musculoskeletal, genitourinary, and gynecological systems. Concepts related to psychopathology and oncology are included. Concurrent clinical practice in the care of patients with specific dysfunctions builds upon the theoretical framework of wholism presented in lecture. The course includes a specialized clinical rotation in mental health nursing. (CSU)

**VOC NUR 006 Advanced Medical/Surgical Nursing Units 9**

*Prerequisites: VOC NUR 6.*

*Limitations on Enrollment: None.*

*Advisories: None.*

This course is designed to broaden student exposure to and perceptions of the biological, psychological, sociological, cultural, and spiritual aspects of health care. The student is introduced to concepts of illness and wellness states as related to immunology and communicable diseases. Trauma and emergency nursing care procedures are presented. Ethical and legal issues and relevant pharmacology content are integrated. Rehabilitation programs are included to emphasize the community aspects of nursing care. Leadership and supervision content are presented to help the student relate to the various roles within the health care organization. (CSU)

## Description of New Course

### Effective Spring 2007

**RAD 040 Senior Review, Adv. Radiation Protection, & Fluoroscopic Systems Units 6**

*Prerequisites: RAD-010 Introduction to Radiography each with a grade of "C" or better.*

*Prerequisite Skills: None.*

*Corequisites: None.*

*Limitations on Enrollment: Admission to the Radiological Technology Program due to contractual agreement with hospital.*

*Advisories: None.*

This course is designed for advanced student qualifying for graduation from a 24-month program. The course includes formal instruction in radiation protection, specifically California Code of Regulations Title 17, Public Health, and the standards of the National Council on Radiation protection (NCRP). In preparation for the state and national examinations, a comprehensive review of materials covered throughout the two-year period is included with additional information on imaging equipment and innovative technology. (CSU)