

MULTIMEDIA ART AND TECHNOLOGY

(Previously listed under ART)

MART 314 INTRODUCTION TO COMPUTER GRAPHICS

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: State of the art computer graphics software are introduced with respect to print, web and motion graphics. Introduction to typography graphic layout/design fundamentals, as well as web design skills and other computer graphics software applications. As this is a fine arts course, students generate their own creative content for publication. Transfer: CSU, UC.

MART 325 DIGITAL PAINTING

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/48 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Using Procreate's Painter software and digital painting tablets, students use digital tools for the artistic expression of the concepts and techniques of traditional painting. Some painting and computer knowledge desirable. May be repeated twice for credit. Transfer: CSU.

MART 361 DIGITAL VIDEO

Units (Grade Option) 3; Class Hours: Minimum of 32 lecture/16 lab/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: This course covers the creation of short videos utilizing desktop video software. Techniques for the effective use of transitions, titles, story line, and artistic creativity are covered. Also covered are video file formats, digital video cameras, and digitizing analog video. The student is expected to produce a short video piece as a final project for transferring to VHS tape, compact disk, or publishing on the WEB. Transfer: CSU.

MART 362 DIGITAL PHOTOGRAPHY I

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: An introduction to the theory and technology of digital photography. Exploration of the digital camera in both professional and consumer use. Techniques of taking a photograph, types of storage, transferring of images, image editing, and optimizing final output are evaluated. May be repeated once for credit. Transfer: CSU, UC*.

MART 363 DIGITAL PHOTOGRAPHY II

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 362. Description: Intermediate photographic technologies covering the complete cycle of production from image setup to output. Emphasis is placed on developing skill in creating digital photographic imagery for creative, cultural and professional expression. May be repeated once for credit. Transfer: CSU.

MART 365 PHOTOGRAPHIC RETOUCHING AND RESTORATION

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 376 or equivalent. Description: Understand the theory and learn the skills necessary for restoration and retouching both vintage and problem photographs. Assess photographs for image, tone, exposure, and color cast correction. Successfully remove dust, mold and texture: rebuild, refine and polish photographs. Transfer: CSU.

MART 366 COLOR MANAGEMENT AND DIGITAL PRINTING

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 376 or equivalent. Description: Create a successful color management workflow from digital image to digital print. Understand and use color, calibration, and create profiles to get the desired color output. Topics include pre-press file management, RGB to 4-color ink, paper, output, proofing, and industry standards. Transfer: CSU.

MART 368 WEB DESIGN I

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: This course teaches the fundamentals of creating a website through a mixture of hands-on exercises, lecture, and demonstration. Topics include site layout principles, a discussion of HTML, color and image preparation, for the web, browser compatibility, graphic user interface design, usability and internet ethics and copyright issues. Students build a basic website following accepted design layout standards. The class focuses on Dreamweaver®, but also uses Adobe Photoshop®, ImageReady® and a basic demonstration of Flash®. Transfer: CSU.

MART 369 WEB DESIGN II

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 368. Description: Students learn advanced concepts and techniques to create elaborate and visually appealing websites. User centered design, graphic user interface customization, Internet ethics, and copyright issues are taught as well as a review of basic color, layout and typography theory and practice. Some HTML, JavaScript, and CGI concepts are demonstrated to incorporate some basic interactivity. This course is taught using Macromedia Dreamweaver®, Adobe Photoshop® and ImageReady®. Other software may be utilized. Transfer: CSU.

MART 372 DIGITAL ILLUSTRATION

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: This course teaches the fundamentals of digital illustration with Adobe Illustrator, through a mixture of hands on exercises, lecture, and demonstration. Topics include design, layout, typography, and color principles, vector graphics versus raster graphics and project preparation for print. By the end of the class the student finishes at least five different kinds

of projects ranging from promotional posters and business cards, to bottle labels and restaurant menus. Transfer: CSU.

MART 373 DIGITAL AUDIO I

Units (Grade Option) 1; Class Hours: Minimum of 16 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Introduction to digital audio production utilizing Digidesign's Pro Tools to familiarize students with diverse production techniques, most common file formats, and compression methods used in multimedia applications. The course focuses on digital audio for the web, CD-ROM based productions, and digital video projects. The fundamentals of digital audio theory, digital sound recording, editing, mixing, and encoding sound files are also covered. May be repeated once for credit. Transfer: CSU.

MART 376 DIGITAL IMAGING I

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: An introduction to the theory and technology of digital imaging. Students work with digital images using Adobe Photoshop®. Students work with image correction tools and learn the toolset necessary to create and manipulate digital photographs, scanned images, and those files created directly in the computer. Students' images become part of a basic portfolio. Transfer: CSU, UC*.

MART 377 DIGITAL IMAGING II

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 376. Description: Using Adobe Photoshop® and other digital design software, students develop strategies for content development, visual cohesiveness and graphic production techniques. Topics include design, layout, typography, and color principles, vector graphics versus raster graphics and project preparation for print. The student creates projects ranging from promotional posters and business cards, to bottle labels and restaurant menus. Transfer: CSU.

MART 378 DIGITAL PAGE LAYOUT

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: This is an introductory course in page layout for graphic design, using computers to design and layout text and graphics for publication. Through projects and assignments, students integrate sound design principles and desktop publishing skills. Both Macintosh and Windows environments are supported. Transfer: CSU.

MART 379 DIGITAL ANIMATION I: FLASH®

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: A project-based course in which both traditional and digital animation techniques such as storyboarding and frame-by-frame animation are explored through the use of Macromedia Flash® as a medium for the

development of creative computer-based animations. Other topics included in this course deal with the implementation of successful graphic user interface solutions for web design and stand-alone applications using the scripting capabilities of the software. Transfer: CSU.

MART 380 DIGITAL ANIMATION II: FLASH®

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 379 or equivalent. Description: This course utilizes Macromedia Flash® as a medium for the development and exploration of computer-based cinematic animations, advanced interactive projects as well as the application of basic scripting principles. The class is project-based and geared towards the creation of interactive, self-contained and optimized Flash® applications, both for a web media and CD-ROM presentations. Student projects are developed through the integration of rich media such as audio and video with ActionScript and advanced animation techniques. Further independent instruction is encouraged through a wide range of sources such as internet tutorials, books and experimentation. May be repeated twice for credit. Transfer: CSU.

MART 389 MULTIMEDIA CAREERS

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 420 and ENGL 100; Prerequisite(s): None. Description: Introduction to the multimedia job market and employment niches. The class describes multimedia and the varied work environments including full time and contract opportunities, as well as job search techniques, resume and cover letter writing skills. Transfer: CSU.

MART 390 PORTFOLIO CREATION

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Portfolio creation is the culminating course for those students interested in the various Certificates of Completion, Certificates of Proficiency, and Associate of Arts Degree in Multimedia. Students develop a portfolio consisting of work accomplished to date. The portfolio may be print based, web based or on CD following a format appropriate with the student's career/academic goals. The students also include a résumé that is appropriate for their field of interest and learn the skills necessary to conduct a successful job interview. May be repeated once for credit. Transfer: CSU.

MART 400 MOTION GRAPHICS

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Digital integration of audio, video and motion graphics through the creation of experimental short narrative scenes. Covers preproduction and production techniques, emphasizing editing and compression methods for web, CD-ROM or DVD delivery. Successful story-telling through the use of story boarding, camera composition and scene sequencing techniques. May be repeated once for credit. Transfer: CSU.

MART 405 STORYBOARD DEVELOPMENT FOR ANIMATION AND INTERACTIVE MEDIA

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** Introduction to storyboarding and the planning processes of visual storytelling. Translation of concepts such as shot types, continuity, pacing, transitions and sequencing into a visual narrative. Exploration of cinematic vocabulary and story board technique in the creation of both personal and professional expression. Transfer: CSU.

MART 418 HISTORY OF ANIMATION

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** This course is a multicultural and multidisciplinary approach to the production and development of animation throughout history. Material spans from the roots of animation before film technology to modern commercial and artistic animated productions. Topics include experimental and traditional animation techniques, an overview of current technologies and the aesthetics and visual styles in different genres. The history of animation is viewed through its social context and impact since its inception, through the past century to the contemporary era. Transfer: CSU.

MART 420 3D MODELING AND ANIMATION I

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 376 or equivalent. **Description:** Basic concepts of 3D modeling and animation using Alias' Maya including the production of three-dimensional computer animations and the different approaches to modeling in a 3D environment. Familiarization with both the interface and the production process of 3D animation. Texture mapping, lighting and rendering of simple animations and environments. May be repeated once for credit. Transfer: CSU.

MART 421 3D MODELING AND ANIMATION II

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 420 or equivalent. **Description:** Continuation of MART 420. Further development of concepts and techniques introduced in MART 420 to establish a solid foundation in storytelling, modeling, animation, texture creation and lighting. Rendering professional final scenes state-of-the-art 3D animation software such as Alias' Maya. Also covered is the production process and pipeline used in video game companies and animation studios and the final delivery of projects created for various media. May be repeated once for credit. Transfer: CSU.

MART 430 3D CHARACTER CREATION AND ANIMATION

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/32 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 420 or equivalent. **Description:** Character animation concepts including character thinking, changes of emotion, speaking (lip-sync animation)

and walking cycles. Cartooning effects such as squash and stretch as well as using Alias' Maya controls to create a more humanistic character animation. Basic concepts dealing with character planning and character sheets. Character rigging and the effect of weight and gravity when animating biped, quadruped or any anthropomorphic character. May be repeated once for credit. Transfer: CSU.

MART 431 SPECIAL EFFECTS AND COMPOSITING IN 3D

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 377 and 420 or equivalent. **Description:** Techniques for the creation of special effects and 3D graphics through digital compositing for film and video. Merging original 2D images such as photographs or other still images generated in Photoshop or Corel Painter with 3D models created in Alias' Maya program. Different output formats and uses for these compositing techniques in diverse industries. May be repeated once for credit. Transfer: CSU.

MART 432 3D ENVIRONMENTS AND HARD SURFACE MODELING

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 377 and 420 or equivalent. **Description:** Course covers the creation of 3D worlds and modeling of non-organic forms such as vehicles, surroundings, architecture and mechanical devices as well as developing the look and feel of 3D environments where characters interact. Students learn to use different reference materials and research inspirational resources when generating a world concept. Various rendering techniques and the creative presentation of final work are also covered. May be repeated once for credit. Transfer: CSU.

MART 440 VIDEO GAME 3D PRODUCTION TECHNIQUES

Units (Grade Option) 1.5; Class Hours: Minimum of 24 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MART 377 and 420 or equivalent. **Description:** Video game art-specific production techniques, asset delivery, and workflow. Texture, bump, specular, and alpha maps to create the illusion of complexity in models. Focus on low polygon modeling techniques, tiling, photorealistic textures, and character animation loops. Basic Mel scripting, workflow and asset delivery methods to increase productivity and efficiency when generating game graphics. May be repeated once for credit. Transfer: CSU.

MUSIC

MUS. 100 FUNDAMENTALS OF MUSIC

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** Learn basic musical skills: reading music notation, sight-singing and ear training, using scales, chords and key signatures to harmonize simple melodies. Students develop listening techniques and explore musical styles. Does not satisfy requirements for the music major degree. Transfer: CSU: C1, UC*. (IGETC: 3A)

MUS. 115 ART, MUSIC AND IDEAS

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: An introduction to the understanding and appreciation of art and music, especially in the context of European history. An investigation into the elements of art and music equip the student to see and hear with greater discrimination, as well as recognize how these elements relate to changes in society. Lectures are illustrated with slides, recordings, films, etc., attendance at a live performance and a museum visit required. Transfer: CSU: C1, UC. (IGETC: 3A)

MUS. 120 SONGWRITING WORKSHOP I

Units (Grade Option) 3; Class Hours: Minimum of 40 lecture/24 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): MUS. 100. Description: Combines the study of lyrics, melody, harmony and form to create songs. Simple computer tools are used to aid in creating, hearing and notating student work. Transfer: CSU.

MUS. 121 SONGWRITING WORKSHOP II

Units (Grade Option) 3; Class Hours: Minimum of 40 lecture/24 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): MUS. 120. Description: Continuation of MUS. 120. Combines further study of lyrics, melody, harmony and form to create songs. Simple computer tools are used to aid in creating, hearing and notating student work. Transfer: CSU.

MUS. 122 SONGWRITING WORKSHOP III

Units (Grade Option) 3; Class Hours: Minimum of 40 lecture/24 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): MUS. 121. Description: Continuation of Music 121: This course provides advanced study of lyrics, melody, harmony and form to create songs. Simple computer tools are used to aid in creating, hearing and notating student work. Transfer: CSU.

MUS. 161 FILM MUSIC PRACTICUM

Units (Grade Option) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): MUS. 290 and completion of, or concurrent enrollment in MUS. 260. Description: Learn how to compose music for film and other media. Apply music concepts such as spotting, synchronization, sound editing and various aesthetic approaches to creatively add sound to the moving image. Instruction features hands-on use of commonly available commercial music software, as well as lecture and viewing film excerpts. Transfer: CSU.

MUS. 202 MUSIC APPRECIATION (CAN MUS 8)

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Learn about musical terms and ideas and apply that knowledge to many types of music such as popular, classical, jazz, and other forms of music from around the world. Consider different ways of listening to music and learn about the different meanings music can have in

entertainment, history, ritual, film and other contexts. Concert attendance required. Transfer: CSU: C1, UC. (IGETC: 3A)

MUS. 210 HISTORIES OF POPULAR MUSIC AND ROCK

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description: Join the argument over what is more significant in popular music – that which is most popular, or that which is the most influential? This course explores the various intersections of music and American culture in the blues, rock, heavy metal, jazz, soul, R&B, disco and dance music, and hip-hop. Transfer: CSU.

MUS. 230 BEETHOVEN

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description: Listen to Beethoven's symphonies, piano sonatas, and string quartets in detail. Relate Beethoven and his music to society, and to later 19th-century culture. Bach, Haydn and Mozart are sure to make guest appearances. Ability to read music not required, but scores are used to illustrate details. Concert attendance required. Transfer: CSU.

MUS. 240 MUSIC OF THE AMERICAS

Units 3; Class Hours: Minimum of 48 lecture/16 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Learn about the rhythms and varieties of music in Latin America and the cultural roots that nurture this exciting form of expression. Music from the Caribbean and South, Central and North America is covered, including genres such as corridos, son, rumba, and tangos. Concert attendance is required. Transfer: CSU: C1.

MUS. 250 WORLD MUSIC

Units 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. Description: Survey of selected listening and readings about cultures such as India, China, Japan, Indonesia, Europe, North and South America, and Africa. Students learn to use basic musical terminology in describing that music, and to relate music behaviors to the cultural contexts that surround them. Equal emphasis is placed on music and culture. Concert attendance is required. Transfer: CSU: C1, UC. (IGETC: 3A)

MUS. 260 MUSIC IN FILM, TELEVISION AND MULTIMEDIA

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. Description: Appreciate the use of music and sound in film, television and media such as video games for expressive purposes and for the creation of virtual realities. As you analyze scenes, learn about fundamental music, sound design and film concepts and terminology. Transfer: CSU.

MUS. 271 OPERA AND MUSICAL THEATER HISTORY

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for ENGL 110; Prerequisite(s): None. **Description:** Explore the highlights in the history of opera from its invention in the Baroque era to contemporary experiments with musical theater included along the way. Class lectures emphasize listening and viewing opera excerpts. Some lectures are planned around attending a live performance. Transfer: CSU.

MUS. 290 INTRODUCTION TO MUSIC AND COMPUTERS

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 420, ENGL 100, and MATH 110 or 111; Prerequisite(s): None. **Description:** Introduction to basic concepts used in making music with computers, digital audio and MIDI (Musical Instrument Digital Interface). Fundamentals of digital audio theory and basic concepts of song creation are covered. Transfer: CSU.

MUS. 301, 302, 303, 304 PIANO I, II, III, IV

Units (Grade Option) 2; Class Hours: Minimum of 32 lecture/16 lab/48 by arrangement lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MUS. 302, 303 and 304 require the previous level. **Description:** These applied music courses stress the basics of piano playing from beginning through advanced levels. Students are taught the foundations of piano technique, to read music, to play musically, and to expand their repertoire. For those with no music literacy, concurrent or previous enrollment in MUS. 100 is recommended if enrolling in level I. MUS. 304 may be repeated for credit. Transfer: CSU, UC.

MUS. 371, 372, 373, 374 GUITAR I, II, III, IV

Units (Grade Option) 1; Class Hours: Minimum of 48 lecture/lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): Possession of a guitar. MUS. 372, 373 and 374 require the previous level. **Description:** These courses cover basic techniques of playing the guitar from beginning through advanced levels. Group and individual attention are included. Transfer: CSU, UC.

MUS. 461, 462, 463, 464 INSTRUMENTAL ENSEMBLE I, II, III, IV

Units 1; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): MUS. 461 requires demonstration of ability by audition. MUS. 462, 463 and 464 require the previous level. **Description:** These courses are a Brass, String, and Woodwind ensemble. Performance is required. Transfer: CSU, UC.

MUS. 476 CHOIR

Units (Grade Option) 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): Student must be able to match pitch vocally. **Description:** This course is the study and performance of choral literature for accompanied and unaccompanied chorus. The repertoire includes "popular" contemporary styles. Performances are required. Field trips may be required. May be repeated for credit up to 3 times. Transfer: CSU, UC.

MUS. 486 COLLEGE SINGERS

Units 1; Class Hours: Minimum of 80 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): Previous choral experience and demonstrated ability by audition. **Description:** This is an advanced ensemble specializing in the performance of choral literature for small choruses. The repertoire includes both traditional and contemporary styles. Performances are required. Field trips may be required. May be repeated for credit up to 3 times. Transfer: CSU, UC.

MUS. 490 PENINSULA CANTARE I

Units (Grade Option) 1; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): Previous choral experience and demonstrated ability through auditions. **Description:** Rehearsal and performance of oratorios and other choral literature is the content of this course. Performance is required. May be repeated for credit up to 3 times. Transfer: CSU, UC.

NATURAL SCIENCES

NSCI 100 INTRODUCTION TO NATURAL SCIENCES

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** This course is an overview of the natural sciences, emphasizing the geology and natural history of San Mateo County. Descriptive material is taken from biological, geological and environmental sciences. Field trips supplement lecture material. Transfer: CSU: B1, B2, UC*. (IGETC: 5A, 5B)

OCEANOGRAPHY

OCEN 100 OCEANOGRAPHY

Units (Grade Option) 3; Class Hours: Minimum of 48 lecture hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None. **Description:** Chemical and biological history of the oceans, currents, waves, tides and coastal processes are studied in this course. Origin and evolution of the oceans and ocean basins with emphasis on recent discoveries in continental drift and sea floor spreading are included. Transfer: CSU: B1, UC. (IGETC: 5A)

OCEN 101 OCEANOGRAPHY LAB

Units 1; Class Hours: Minimum of 48 lab hours/semester; Recommended: Eligibility for READ 836, and ENGL 836 or ESL 400; Prerequisite(s): None; Corequisite(s): Completion of, or concurrent enrollment in OCEN 100. **Description:** Introductory laboratory exercises in plate tectonics; the geography and sediments of the seafloor; the cause and effect of weather, waves, and currents; the physics and chemistry of seawater; marine life forms; marine resources, and the effect of humans on the sea. A field trip is required. Transfer: CSU: B3 (only if OCEN 100 is successfully completed prior to or concurrently with OCEN 101). (IGETC: 5A)