Architecture (ARC)

110 Introduction to Architecture (1) UC:CSU
Lecture 1 hour.
This is an introductory course exploring the fields of Architecture and Construction Technology. Students will gain an understanding of the opportunities in these fields as well as paths to careers and to higher education. Professional practices and sustainable methods will be introduced, as well as architectural theories and landmark buildings.

111 Methods of Construction (2) CSU
Lecture 2 hours.
Students examine the characteristics of building construction methods within the overall context of sustainable architectural design. The fundamental building methods shall be explored in depth. Their physical properties, historical context, and application within an architectural design shall be studied.

121 Freehand Drawing I (2) UC:CSU
Laboratory 4 hours.
Students will study freehand drawing through an architectural lens, using various media. We will develop the skills of looking and of drawing, practicing perspective, scale, tonal value and shade and shadow. Students will develop their visual communication skills.

151 Materials of Construction (3) CSU
Lecture 3 hours.
Prerequisite: Architecture 111 with a grade of "C" or better.
Studies the nature and characteristics of materials, along with their appropriate uses for given construction purposes.

152 Equipment of Buildings (3) CSU
Lecture 3 hours.
Prerequisite: Architecture 111 and 172.
Using sustainable tools and strategies, this course applies the basic principles of building systems; design, selection and operation of equipment in buildings. Building systems integrate architectural design with water distribution, water recycling and harnessing, air circulation, natural air flow, air heating and cooling, natural light, and acoustics. Passive and solar strategies are integrated into equipment as well as new technologies.

154 Modern and Contemporary Architecture (3) CSU
Lecture 3 hours.
Students will study freehand drawing through an architectural lens, using various media. We will develop the skills of looking and of drawing, practicing perspective, scale, tonal value and shade and shadow. Students will develop their visual communication skills.

160 Computers for Designers (3) CSU
Laboratory 6 hours.
Students are introduced to computer applications such as Rhino and Form Z. Students develop awareness of the role of digital mediums in today's sustainable demands and gain technology software skills to create two- and three-dimensional digital environments. High tech 2D and 3D printing and virtual imaging are covered. This course is geared towards students who want to develop skills as built environment, ecological sustainability, entertainment, engineering and industrial designers.

161 Introduction to Computer-Aided Architectural Design (2) UC:CSU
Lecture 1 hour. Laboratory 2 hours.
This class is an introduction to computer-based architectural design and drafting. Students will use 2D and 3D computer visualization applications such as Revit and Rhino, cutting edge Building Information Modeling (BIM) tools. Basic computer operations like operating systems, interfaces, print, view, export, file management, image manipulation are covered within drafting and design exercises.

162 Computer-Aided Design and Drafting (3) CSU
Lecture 2 hours. Laboratory 4 hours.
Learn and apply 2 and 3D CAD and Building Information Modeling (BIM) architectural software. This course develops 2 and 3D architectural drawing techniques as well as more advanced 3D commands and 3D modeling methods by completing a series of architectural exercises. The latest versions of popular software are utilized. Important for students interested in the fields of architecture, interior design, and construction. 3D modeling programs such as Revit are introduced.

172 Architectural Drawing I (3) CSU
Laboratory 6 hours.
This is a first level architectural technical drawing class. Students will develop working drawings for a simple light framed wood building. This course includes the study of construction methods, materials and building ordinances. Students examine the integration and implementation of sustainable practices in design and construction technologies. The work in this class includes graphic representation of site, foundation, floor and roof plans, schedules, cross-sections, details and interior and exterior elevations. Additionally conceptual and analytical skills will be developed.

173 Architectural Drawing II (3) CSU
Laboratory 6 hours.
Prerequisite: Architecture 172 with a grade of "C" or better.
This is the second level architectural technical drawing class. Students develop working drawings for a multi-story structure, addressing a range of complex contextual and environmental issues. Students study construction methods, materials and building ordinances. Students also examine the integration and implementation of sustainable practices in design, construction technologies and energy-using systems. Other topics include graphic representation of site, floor and roof plans, schedules, cross-sections, details, interior and exterior elevations.

201 Architectural Design I (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Architecture 172 and Environmental Design 102 with a grade of "C" or better.
This third semester architecture studio course engages environmental, architectural, societal and sustainable design considerations. Concept, meaning, program, space, light, site and context are explored through research, field investigation, site analysis and building design. Constraints of building structure and materials are introduced. Various environmental, aesthetic, political, social, and cultural issues impacting architectural design are explored. Field trips are required. Students will create digital and printed portfolios of their work.
202 Architectural Design II (3) UC/CSU
Laboratory 6 hours.
Prerequisite: Architecture 201 with a grade of “C” or better.
This fourth semester architecture studio course engages environmental, architectural, societal and sustainable design considerations. Concept, meaning, program, space, site and context are explored through research, field investigation, site analysis and building design. Context, and various environmental, aesthetic, political, social, and cultural issues impacting architectural design are explored. Integrating energy-using systems is introduced. Field trips are required. Students will create digital and printed portfolios of their work.

210 Construction Estimating (3) CSU
Lecture 3 hours.
Studies methods used in determining quantities and costs of labor and materials as related to construction.

221 Architectural Rendering (2) CSU
Laboratory 4 hours.
Prerequisite: Architecture 121 with a grade of “C” or better.
In this class students develop skills using various techniques of architectural rendering and experiment with a variety of media with a primary focus on hand techniques. Freehand drawing, drafting and some computer drawing may be used.

271 Architectural Drawing III (3) CSU
Laboratory 6 hours.
Prerequisite: Architecture 173 with a grade of “C” or better.
This is a third level architectural technical drawing methodology class. Students will be using computer software such as AutoCAD, to develop a multi-story structure on a complex site addressing a range of contextual and environmental issues, including sustainable design principles. Different building materials such as concrete and metal will be studied and incorporated into the building. A complete set of design and technical drawings of the residence will be produced. Creative, conceptual and analytical skills will be further developed and fundamental computer drawing techniques and 3D computer modeling methods will be refined. Students will create a portfolio of their work.

272 Architectural Drawing IV (3) CSU
Laboratory 6 hours.
Prerequisite: Architecture 271 with a grade of “C” or better.
This is a fourth level architectural technical drawing methodology class. Using computer aided design software such as AutoCAD, students will design a multi-story structure which will address a range of complex contextual and environmental issues, including sustainable design principles and code compliance design. Different building materials such as concrete and metal will be studied and incorporated into the building. A complete set of design and technical drawings of the residence will be produced. Creative, conceptual and analytical skills will be further developed. Fundamental architectural drawing techniques as well as 3-d computer modeling methods are refined. Students will create a portfolio of their work.

291 Strength of Architectural Materials I (3) CSU
Lecture 3 hours.
Includes material relative to the strength, mechanical principles and design (stresses, tension, compression, shear, and bending) of building materials, and their uses in foundations, floors, walls, columns, and roofs.

185 Directed Study - Architecture (1) CSU
285 Directed Study - Architecture (2) CSU
385 Directed Study - Architecture (3) CSU
Conference 1 hour per unit.
This course allows students to pursue directed study in Architecture on a contract basis under the direction of a supervising instructor.

Art

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in “active participation courses” in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per “family.” Failures and “W” grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Art department, families have been created as follows:

ART FAMILY NAMES AND COURSE NUMBERS:

Ceramics . . . . . . . . . . . . . . ART 708-711
Design . . . . . . . . . . . . . . . . ART 501-503, 520
Directed Studies . . . . . . . . . ART 185, 285, 385
Drawing . . . . . . . . . . . . . . ART 100, 201-203, 209
Life Drawing . . . . . . . . . ART 204-207
Oil Painting . . . . . . . . . . ART 307-309
Sculpture . . . . . . . . . . . . . ART 700-703, 706, 707
Water Color & Acrylic . . . ART 300-306

092 Introduction to Museum Studies (3) UC/CSU
Lecture 3 hours.
This course provides a broad introduction to the field of museum work. Topics included are the history and philosophy of museums; the social, economic, and political trends that shape museums; the staffing, management, and financing of museums; and the multiple functions of museums, such as the collection and care of objects, exhibition design and interpretation, education programs, research activities, library collections, and public relations. Students personally engage with museum professionals, including: department directors, curators, conservators, collection managers, educators, and exhibit designers.

101 Survey of Art History I (3) UC/CSU
Lecture 3 hours.
May be offered as an honors section.
Students examine and analyze architecture, sculpture, and painting from the prehistoric, Ancient, Classical and Medieval periods of western culture considering the social, political and religious influences on the art production.
(CSU GE Area C1 • IGETC Area 3A)
C-ID: ARTH 110

102 Survey of Art History II (3) UC/CSU
Lecture 3 hours.
May be offered as an honors section.
Note: Art 101 is not a Prerequisite for 102.
This course surveys Western European painting, sculpture, and architecture from the Late Gothic to the early twentieth century. Students examine and analyze social, economic, political, and religious contexts, as well as the style and functions of works of art. Students will use art vocabulary, construct a visual analysis, and examine different methodological approaches to analyzing works of art.
(CSU GE Area C1 • IGETC Area 3A)
C-ID: ARTH 120
103 Art Appreciation I (3) UC:CSU
Lecture 3 hours.
Recommended for non-Art majors. Recommended, but not required for Art majors.

In this course, students will understand and appreciate the visual arts. Works of art may be presented through field trips to museums and galleries.

(CSU GE Area C1 • IGETC Area 3A)

105 History of Asian Art (3) UC:CSU
Lecture 3 hours.

This survey course is a select overview of the art and architecture of India, Southeast Asia, China, Korea, and Japan from pre-history to contemporary times. Students will examine the social, economic, political, religious, and philosophical context of the production and use of the works of art considered. Students will also consider the interchange of cultural influence and artistic expression.

(CSU GE Area C1 • IGETC Area 3A)

107 Mexican Art-Modern (3) UC:CSU
Lecture 3 hours.

This course surveys the rich cultural production of Mexico, beginning with the Mesoamerican period but focusing primarily on the 19th-21st centuries. It will examine the social, economic, political and religious context of the production and use of the works of art considered. The course will look at work in a variety of media, including painting, sculpture, architecture, installations, prints, and photography.

109 The Arts of Africa, Oceania, and Ancient America (3) UC:CSU
Lecture 3 hours.

This course engages selected topics in the history of Non-Western art from the indigenous cultures of Africa, the islands of the South Pacific (Oceania), and pre-European contact North America and Mesoamerica. Students explore and compare the art-making practices of these cultures by examining the social, economic, political and religious context of the production and use of the works of art considered. Students learn and evaluate different art historical methodological approaches to the analysis of the material considered. Students master and employ art historical and artistic vocabulary as they conduct visual analysis of various works of art, including paintings, sculptures, architecture, ceramics, textiles, and body arts. In addition, the course will critically address commonly-held Western assumptions and stereotypes about the non-Western world and its arts.

(CSU GE Area C1 • IGETC Area 3A)

111 History of Contemporary Art (3) UC:CSU
Lecture 3 hours.

This course surveys the major trends and movements in Western Contemporary Art. Works of art are discussed both in class, in museums, and at site-specific locations. Students will master art historical and artistic vocabulary, and will learn to perform visual analysis of compositions of painting, sculpture and other forms of visual art.

(CSU GE Area C1 • IGETC Area 3A)

119 Theories of Art (3) UC:CSU
Lecture 3 hours.

This course is geared to both studio and art history students. Students analyze artistic and aesthetic theories from ancient times to the twentieth-century. They will employ various methodologies and theories to works of art and movements that have played a crucial role in shaping the study and production of art.

137 Architectural History I: Prehistory to the Middle Ages (3) UC:CSU
Lecture 3 hours.

This course will cover the history of architecture from prehistory to the middle ages. Stress will be on the development of typology, as well as on the influences from social, cultural, religious, political and economic conditions that influenced changes in form and style. Museum and on site visits may be included as part of the curriculum.

(CSU GE Area C1 • IGETC Area 3A)

138 Architectural History II: Late Middle Ages to Modern (3) UC:CSU
Lecture 3 hours.

This course covers the history of architecture from the late middle ages to the modern period. Focus will be on changing typology, technological advancements, new building materials, literary and intellectual movements, and on the socio-political and religious influences on the look of buildings. Museum and site visits may be included as part of the curriculum.

(CSU GE Area C1 • IGETC Area 3A)

139 Architectural History III: Modern Architecture (3) UC:CSU
Lecture 3 hours.

The course will cover modern architecture from around 1850 to the present, examining the changing range of typology and construction, the influence of the theoretical schools, literary movements, and socio-political influences on the look of buildings. Museum and on-site visits may be part of the curriculum.

(CSU GE Area C1 • IGETC Area 3A)

201 Drawing I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.

Students apply elements and principles of design to the practice of drawing, employing a wide range of subject matter, drawing techniques and media. They apply critical analysis, art fundamentals, and strengthen their understanding of visual perception and the cultural history of drawing.

(CSU GE Area C1)

C-ID: ARTS 110

202 Drawing II (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.

Prerequisite: Art 201 with a grade of "C" or better.

Students explore artistic concepts, styles and creative expression related to intermediate drawing, focusing on complex subject matter and concepts using a variety of drawing media, techniques and methodologies. Students further develop technical and observational skills introduced in Drawing I, while arriving at personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing.

203 Drawing III (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.

Prerequisite: Art 202 with a grade of "C" or better.

This course challenges students to reconsider how and why they are making art. Projects, discussions, and critiques place an emphasis on developing concepts and advanced processes in the context of contemporary drawing. Students must exhibit strong growth in their ability to create technically and conceptually mature drawings and visualize connections to art history and critical theory. Students are encouraged to become more aware of their own artistic inclinations and investigate them in their class experience.
204 Life Drawing I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 201 with a grade of "C" or better.
Students will render the human figure through gesture, contour, and value. Students will use a variety of materials and techniques to describe the human form.

205 Life Drawing II (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 204 with a grade of "C" or better.
This course exposes students to formally and conceptually diverse approaches to drawing the human form. It allows them to further investigate and experiment with various materials and techniques, as well as build upon their own aesthetic interests. Emphases are placed on practicing proportional accuracy, demonstrating the principles of light logic, developing dynamic compositions, and successfully applying color theory.

206 Life Drawing III (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 205 with a grade of "C" or better.
This course stresses both critical theory and technical craftsmanship. Students will refine their observational figure drawing skills in class, while at-home projects promote individual expression and creativity. Students are expected to explore their own artistic tendencies, critique their work, pinpoint problems as they occur in the drawing process, and come up with intelligent and creative solutions to those problems.

207 Life Drawing IV (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 206 with a grade of "C" or better.
Students advance their rendering skills and are given freedom to investigate their own artistic agendas as they relate to the human form. They are challenged to develop content and to find appropriate formal vehicles that effectively relay that content to the viewer.

209 Perspective Drawing I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Students develop an understanding of the concepts and manual skills necessary to construct drawings that accurately represent three-dimensional forms in linear and atmospheric perspective. Students also become familiar with perspective techniques used to manipulate and distort representational imagery, and explore how to use principles of perspective to emphasize content.

301 Watercolor Painting I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
This course is designed to offer students a variety of Watercolor Painting techniques as applied to Still-Life, Landscape, Abstract and the Human Figure. Traditional and Contemporary approach will be explored.

302 Watercolor Painting II (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 301 with a grade of "C" or better.
This course is a continuation of Watercolor Painting I and deals with more advanced water color techniques. Emphasis is placed on composition through perceptual and conceptual approaches. The student will experiment with the use of multiple image in subject matter. Both landscape and still subjects will be explored as well as more advanced and personal areas of investigation that the student will bring to the course.

303 Watercolor Painting III (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 302 with a grade of "C" or better.
This course exposes students to formally and conceptually diverse approaches to drawing the human form. It allows them to further investigate and experiment with various materials and techniques, as well as build upon their own aesthetic interests. Emphases are placed on practicing proportional accuracy, demonstrating the principles of light logic, developing dynamic compositions, and successfully applying color theory.

304 Watercolor Painting IV (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 303 with a grade of "C" or better.
This course advances students' understanding of Watercolor Painting techniques used to manipulate and distort representational imagery, and explore how to use principles of perspective to emphasize content.

305 Watercolor Painting V (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 304 with a grade of "C" or better.
This course exposes students to formally and conceptually diverse approaches to drawing the human form. It allows them to further investigate and experiment with various materials and techniques, as well as build upon their own aesthetic interests. Emphases are placed on practicing proportional accuracy, demonstrating the principles of light logic, developing dynamic compositions, and successfully applying color theory.

306 Watercolor Painting VI (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 305 with a grade of "C" or better.
This course advances students' understanding of Watercolor Painting techniques used to manipulate and distort representational imagery, and explore how to use principles of perspective to emphasize content.

307 Oil Painting I (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 201 with a grade of "C" or better.
Students develop skills and techniques in the medium. Both traditional and contemporary approaches to ideas and materials are explored.

308 Oil Painting II (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 307 with a grade of "C" or better.
Students expand skills and techniques in oil painting. Composition and color exploration in the service of communicating individual ideas are emphasized.

309 Oil Painting III (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 308 with a grade of "C" or better.
This course furthers the student's expertise in oil painting. The student develops an individual approach to technique and the creative expression of a personal vision. Research into contemporary and/or historical movements in art is expected to inform the student's work.

400 Introduction to Printmaking (3) UC:CSU
Laboratory 6 hours.
This is a hands-on studio course covering the fundamentals of two-dimensional design. Students will be introduced to the elements of art, principles of design and basic color theory. Course of study will include historical and contemporary perspectives.

(CSUGE Area C1 • IGETC Area 3A)
C-ID: ARTS 100

501 Beginning Two-Dimensional Design (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
This is a hands-on studio course covering the fundamentals of two-dimensional design. Students will be introduced to the elements of art, principles of design and basic color theory. Course of study will include historical and contemporary perspectives.

(CSUGE Area C1 • IGETC Area 3A)
C-ID: ARTS 101

502 Beginning Three-Dimensional Design (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Students are introduced to the principles of three-dimensional design and will develop analytical visual skills and critical awareness by utilizing a variety of techniques and materials. Design theory is integrated with a historical and cultural foundation.

(CSUGE Area C1 • IGETC Area 3A)
C-ID: ARTS 102

503 Intermediate Design (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 501 with a grade of "C" or better.
Students analyze form, texture, and color applied to creative projects. Drawing and design elements are applied primarily to two-dimensional design projects. Color theory and its practical application are emphasized. Students are introduced to three-dimensional design and the development of a portfolio.

603 Typography I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 602 with a grade of "C" or better.
Students are introduced to basic composition and principles of typography, which includes a survey of type from its origins to current uses for print, web video, animation and mobile. Using hand skills and the computer, students focus on typographic design, resonance and composition and develop skills regarding visually interesting letter forms and their uses in typographic design with a focus on appropriate solutions, visual interest and craftsmanship.
604 Graphic Design I (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Art 501.
Students explore the concepts, principles, and procedures used in the field of graphic design and their application in visual communication through type, image, form, and color.
C-ID: ARTS 250

605 Graphic Design II (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 604 with a grade of "C" or better.
This course is a continuation of the principles addressed in Art 604. Students create projects in advertising, publication, and typographical design.

606 Graphic Design III (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 605 with a grade of "C" or better.
Students continue to develop skills acquired in Art 605 and explore computer graphics with emphasis on corporate identity (logos, letterheads and promotional communications).

620 Illustration I (3) UC:CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 201 with a grade of "C" or better.
Illustration I applies basic drawing techniques and design principles to problems in advertising and editorial illustration. Students explore a variety of media and approaches oriented to contemporary demands in the field.

621 Illustration II (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 620 with a grade of "C" or better.
Students continue the study of contemporary illustration through a series of projects with a focus on non-traditional media. Additional emphasis is placed upon the individual needs and skills of each student. Preparing studies for client meetings is covered at the conclusion of the class.

622 Illustration for the Graphic Artist (3)
Lecture 2 hours. Laboratory 2 hours.
Prerequisite: Art 621 with a grade of "C" or better.
Advisory: Art 202, 204, and 300.
Extends basic principles and practices of advertising illustration to problems in graphic design and layout. Projects include the coordination of illustration with photography, design, and other visual media.

635 Desktop Publishing Design (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Art 604.
Students are introduced to course to desktop publishing design. The course is designed for graphic design majors, fine artists, journalism majors, and computer graphics novices. Emphasis will be on computer layout and composition. Students will create computer design layouts utilizing the knowledge gain from class. Basic concepts relating to the fonts, type styles, page design, readability, and final printing production will be explored.

650 Designing for the Web (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Advisory: Computer Science-Information Technology 550.
Students design graphics, videos, and animations for websites, blogs, social networks, and advertisements using various programs to integrate their work into functioning desktop and mobile applications.

651 Animation for the Web (3) CSU
Lecture 2 hours. Laboratory 2 hours.
In this introductory course students apply the principles of design and motion graphics to create animated artwork for a variety of web-based products, such as websites, social networks, advertisements, games, videos, blogs, etc.

700 Introduction to Sculpture (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 700 with a grade of "C" or better.
Students gain experience in designing and executing sculpture form and acquire technical vocabulary to critique their own work in a conceptual manner. Techniques include modeling, casting, carving and fabricating with sculpture media. Historical and cultural antecedents are presented with emphasis on developing sculptural awareness.
(CSU GE Area C1)

701 Sculpture I (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 701 with a grade of "C" or better.
In this course, students design and execute a sculptural form. Students focus on select technical modalities from modeling, casting carving and fabricating. Historical and cultural antecedents are analyzed with emphasis on developing sculptural awareness.

702 Sculpture II (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 702 with a grade of "C" or better.
Students apply materials, techniques and concepts associated with the practice of sculpture. Fabrication techniques are a core component of this course, with assignments providing opportunities for students to solve sculptural problems using various methods and materials in a focused and individualized manner. Critiques serve to enhance this focus and provide students with the necessary vocabulary to discuss their work in a coherent manner.

703 Sculpture III (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 703 with a grade of "C" or better.
Students specialize in one sculptural modality.

708 Introduction to Ceramics (3) UC:CSU
Laboratory 6 hours.
In this beginning course, students practice basic methods of pottery-making and identify design factors unique to clay.

709 Ceramics I (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 709 with a grade of "C" or better.
This course provides continuation of introduction to Ceramics. Students practice forming on the throwing wheel, glaze formulation, and kiln management. Students also explore further concepts of design.

710 Ceramics II (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Art 710 with a grade of "C" or better.
This course builds on the skills acquired in ART 709. Students practice ceramic forming processes and surface treatments with emphasis on three-dimensional design.
Automotive Service Technology (A S T)

001 Automotive Engines (5) CSU
Lecture 3 hours. Laboratory 5 hours.
Students examine the automotive engine, including cooling and lubrication systems. Students overhaul engines in the laboratory, including boring, pin-fitting, measuring, valve seat replacement, valve grinding and other engine rebuilding procedures.

002 Suspension Brakes and Power Systems (5) CSU
Lecture 3 hours. Laboratory 5 hours.
Introduces wheel, brake and suspension systems and service including instruction on power brakes, power steering systems, and anti-lock braking systems. Provides training and supervised repair on automobiles under actual shop conditions.

003 Engine Diagnosis and Tune-Up (5) CSU
Lecture 3 hours. Laboratory 5 hours.
Students learn about the theory and maintenance of engines including engine diagnosis and engine performance tune-ups. This course provides a working understanding of automotive fuel systems, ignition systems, starting systems, charging systems, and emission control systems. Laboratory work will include understanding, diagnosing, and repairing engines and related electrical, fuel, and emission systems to improve engine performance. Includes practice with the latest diagnostic equipment.

004 Starting and Charging Systems/Automotive Electrical Circuits (5) CSU
Lecture 3 hours. Laboratory 5 hours.
Students learn about the theory and maintenance of charging and starting systems. This course provides a working understanding of the electrical systems used on automotive machinery. Laboratory work includes repair work on starters, alternators and troubleshooting components of the electrical system. Includes practice with the latest diagnostic equipment.

005 Standard Transmissions, Clutches, Drive Lines & Differentials (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Students in the course examine manual shift transmissions/Transaxles of various types and sizes used in FWD, RWD, 4WD and AWD automotive applications. Students will discuss drive line problems including clutch, differential and axle systems. Laboratory practice includes the removal and installation of a clutch, overhaul of a manual transmission and transaxle, overhaul of a differential, servicing universal joints and troubleshooting drive line problems.

006 Automatic Transmissions (5)
Lecture 3 hours. Laboratory 5 hours.
Students in the course examine manual shift transmissions/Transaxles of various types and sizes used in FWD, RWD, 4WD and AWD automotive applications. Students will discuss drive line problems including clutch, differential and axle systems. Laboratory practice includes the removal and installation of a clutch, overhaul of a manual transmission and transaxle, overhaul of a differential, servicing universal joints and troubleshooting drive line problems.

007 Air Conditioning (3)
Lecture 2 hours. Laboratory 2 hours.
Students learn the theory and operation of HVAC systems used on the modern automobile. Students learn the latest information on automotive air conditioning and heating systems, including diagnosis, service and repair. Students will have shop practice in testing and proper handling of refrigerants, evacuation, recovery, recycling and recharging of air conditioning systems.
023CE English as a Second Language - Speech I (0) (NDA) - RPT 9
Lecture 6 hours.

This is an open-entry open-exit course that emphasizes listening/speaking and pronunciation skills at an intermediate low level. The focus of the course is on listening and speaking on topics within social and academic contexts. Students will be able to respond to impromptu questions. Students will be able to practice pronunciation skills for better oral communication, as well as developing rhythm, stress, and intonation patterns of English conversation.

024CE English as a Second Language - Speech II (0) (NDA) - RPT 9
Lecture 6 hours.

This is an open-entry open-exit course that emphasizes listening/speaking and pronunciation skills at an intermediate low level. The focus of the course is on listening and speaking through conversations, discussions, and lectures within the contexts of social, academic, legal and medical environments. Students will be able to give brief prepared oral presentation. Students will focus on practicing pronunciation skills for better oral communication, as well as developing rhythm, stress, and intonation patterns of English conversation.

Environmental Design (ENV)

101 Foundations of Design I (3) UC:CSU
Laboratory 6 hours.

This is a first level architectural design studio where students develop creative, conceptual and analytical skills by creating two and three dimensional projects. Students will learn to properly communicate architectural concepts through drawings, renderings, physical models, and computer 3-D modeling. Fundamental architectural formal and spatial design principles, theories, order, methodologies and sustainability are explored and incorporated into student projects. The profession of architecture and the practice of architects are clarified. This fundamentals class is critical for students interested in pursuing a higher degree in architecture school or related design field and is recommended as well for art, interior design, construction and related fields. This course is great as a general education course to develop the creative mind and problem solving skills. Students will also create a portfolio of their work.

102 Foundations of Design II (3) UC:CSU
Laboratory 6 hours.
Prerequisite: Environmental Design 101 with a grade of “C” or better.

Second level architectural design studio. Students continue to develop creative, conceptual and analytical skills by designing more complex projects addressing multiple programmatic requirements, symbolism and contextualism. Drawing, rendering, computer and model making skills are further refined. Students will also create a portfolio of their work.

Environmental Science (ENV SCI)

001 Introduction to Environmental Science (3) UC:CSU
Lecture 3 hours.

Students are introduced to the environmental mechanisms that constitute our planetary life support systems and the social, political and economic factors that are the root of many environmental problems. The fundamental science required to understand how environmental systems work is presented followed by analysis of the basic components of our life support systems and how we impact them. Additional topics will include an examination of the difference between science and technology and the promises and limits of technological solutions to environmental issues.

(CSU GE Area B1 or E • IGETC Area 5A)

002 The Human Environment: Biological Processes (3) **UC:CSU
Lecture 3 hours.

Students are introduced to the biological aspects of our environmental systems. Study will focus on our large-scale systems including populations and ecosystems and small-scale issues such as nutrition and toxicity. A portion of the course will be dedicated to examining the ability of species to adapt: leading to issues such as pesticide and antibiotic resistance. Global population will be examined through the lens of population dynamics. These topics will form a foundation for discussing the dynamic interplay between ecosystems, populations and economics. Upon completion of the course, students will develop an appreciation of the problems facing humans as we attempt to set environmentally meaningful standards for toxins and how important concepts such as nutrition, toxicity, birth defects and cancer rates relate to our environmental life support systems.

(CSU GE Area B2 • IGETC Area 5B)
**UC Credit Limit: Environmental Science 002 and Plant Science 901 combined: maximum credit, one course.

007 Introduction to Environmental Geology (3) UC:CSU
Lecture 3 hours.
Same as Geology 010. Credit not given for both courses.

This course provides a survey of the relationships between humans and the environment, including a review of natural, geological processes and effects. Topics include a discussion of the hazards and risks associated with catastrophic, geologic events like earthquakes, floods, landslides and volcanoes. Mineral, energy, soil and water resources will be discussed, the future of these resources discussed and the impacts of their extraction and consumption investigated.

(CSU GE Area B1 • IGETC Area 5A)

019 The Human Environment: Biological Processes Lab (1) CSU
Laboratory 3 hours.
Prerequisite: Environmental Science 002 with a grade of “C” or better.
Corequisite: Concurrent enrollment in Environmental Science 002.

Through practical demonstrations of environmental impacts to biological systems, students critically evaluate the impacts and develop potential solutions. Topics such as human population and resource consumption, sustainable farming, and extinction are explored.

(CSU GE Area B3)

031 Energy and Power (3) UC:CSU
Lecture 3 hours.

This course provides an overview of energy and power as it pertains to modern societies. Topics include the thermodynamics of energy conversions, modern energy use and the environmental impacts of various energy sources. Embodied energy, energy conservation and life-cycle analysis will be included as this course will encourage students to examine their own energy use in light of sustainability.
020 General Microbiology (4) *UC-CSU
Lecture 3 hours. Laboratory 3 hours.
Note: A total of 5 units given for Microbiology 001 and 020.
Prerequisite: Biology 003 or 006; and Chemistry 051 or Physiology 001 or equivalent with a grade of “C” or better.
This course introduces students to bacteria, viruses, fungi, protozoa, and multicellular parasites, and includes examination of microbial morphology, metabolism, genetics, and the roles of microorganisms in infectious diseases. This course also includes immunology and methods of controlling microorganisms. The labs include microscopy, aseptic technique, cultivation, isolation and identification of bacteria, and control of bacterial populations. This course is recommended for pre-nursing and allied health students who need a 4 unit course with 3 hours of lab per week.
(CSU GE Area B2 + B3 • IGETC Area 5B + 5C)
*UC Credit Limit: Microbiology 001 and 020 combined: maximum credit, one course.

Modern Languages

Modern Language courses are listed separately under the following headings: American Sign Language, French, Italian, Japanese, and Spanish.

Multimedia (MULTIMD)

See also course listings under Media Arts.

110 Visual Communication (3) UC-CSU
Lecture 2 hours. Laboratory 2 hours.
Students develop essential skills needed to create and design digital artwork and explore the different roles, skill sets, jobs, software, and hardware needed to develop audio, video, graphics, games, animation and other artwork intended for interactive delivery.
(CSU GE Area C2)

200 Digital Imaging (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Note: Computer application for this class is Adobe Photoshop.
Students create, design, and manipulate images for animation, video, virtual/augmented reality, websites, and print using digital using Adobe Photoshop. This course covers techniques used by graphic designers and photographers to enhance images for fine art and commercial application.

210 Digital Editing (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Students learn digital video editing using desktop and mobile applications to create video, and animated graphics that can be used for video, animation, games, the web, and virtual and augmented reality.

340 Vector Graphics (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Note: Computer applications covered in this class are Adobe Illustrator and Adobe Flash.
Students use Adobe Illustrator to design digital artwork for print, games, animation, web, video, apps, and virtual/augmented reality.

650 Designing for the Web (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Students design graphics, videos, and animations for websites, blogs, social networks, and advertisements using various programs to integrate their work into functioning desktop and mobile applications.

651 Animation for the Web (3) CSU
Lecture 2 hours. Laboratory 2 hours.
Students apply the principles of design and motion graphics to create animated artwork for desktop and mobile versions of social networks, websites, blogs, advertisements, games, videos and augmented/virtual reality.

185 Directed Study - Multimedia (1) CSU
285 Directed Study - Multimedia (2) CSU
385 Directed Study - Multimedia (3) CSU
Conference 1 hour per unit.
This course allows students to pursue directed study in Multimedia on a contract basis under the direction of a supervising instructor.

Music

Check with the Music Department or Counseling Office for transferability of courses to four-year institutions, and for unit limitations of courses accepted by both University of California and CSUN. All Music Majors are required to enroll in a performing ensemble each semester (Music 501, 721, 745). Performance classes study different literature each semester, and musical growth is in no sense completed in a single semester. For these reasons it is educationally sound for a student to repeat a music performance course.

Title V changes effective Fall 2013 substantially restrict how many times students can take specific types of classes. Students enrolled in “active participation courses” in kinesiology, visual arts, or performing arts are limited to four (4) enrollments per “family.” Failures and “W” grades count as enrollments. A family can contain multiple courses, but a student can only take four of them. LACCD courses in Art, Dance, Kinesiology, Music, and Theater are all affected. For courses in the Music department, families have been created as follows:

MUSIC FAMILY NAMES AND COURSE NUMBERS:
Classical Guitar .................. MUSIC 650-654
Piano ............................. All Levels of MUSIC 311-314, 321-324, 341, 351
Brass Instruments ................ MUSIC 601-604
String Instruments ............... MUSIC 611-614
Woodwind Instruments .......... MUSIC 621-624
Percussion Instruments ........... MUSIC 631-634
Voice ............................. MUSIC 400-403, 411-414, 441, 453

101 Fundamentals of Music (3) UC-CSU
Lecture 3 hours.
Students practice reading and writing music. Notation, keys, scales, intervals, chords, rhythmic drills, sight singing and ear training are examined.
C-ID: MUS 110