

ARCHITECTURE (ARCH)

ARCH 010A ARCHITECTURAL DESIGN FUNDAMENTALS

3 unit

Transfer Credit: CSU; UC

Corequisite(s): ARCH 012A

Recommended Preparation: *Enrollment in or completion of ARCH 011*

Introduction to formal visual principles through design exercises. Emphasis on developing creativity and effectiveness in communicating a comprehensive design concept. Analysis of the built environment focusing on the interaction between art and architecture and their environment. Application of investigation techniques and ideas to the analysis of built form focusing on the connection between built form and its meaning. Execution of projects using a variety of communication skills including: traditional drawing, model making, computer illustration and digital imaging. Required field trips. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: *Audit, Letter Grade*

ARCH 010B DESIGN FUNDAMENTALS

3 unit

Transfer Credit: CSU; UC

Prerequisite(s): ARCH 010A, ARCH 011, and ARCH 012A

Corequisite(s): ARCH 012B

Application of three-dimensional design principles to the execution of simple architectural projects. Emphasis on developing a structured architectural design process that will lead to solutions that are firmly based on concepts. Field trips for active research and exploration of project sites. Study and application of abstract architectural theories of three-dimensional form, space, order, program and site in design projects. Required field trips. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: *Audit, Letter Grade*

ARCH 011 INTRODUCTION TO ARCHITECTURE

2 unit

Transfer Credit: CSU; UC

An exploration of architectural education and the design professions through topics such as design, drawing, contemporary philosophies of design, and theory. A study of the past, present, and future of the architectural profession and an examination of various related design professions including landscape architecture, interior design, industrial design, city planning, and urban design. Survey of the various roles these designers play in effecting the built environment as individuals and how they interrelate as a design team. Observation of significant architectural examples will present architecture as a unified expression of an architect's dream. Required field trips. Total of 36 hours lecture.

Grade Mode: *Audit, Letter Grade*

ARCH 012A VISUAL COMMUNICATIONS I

3 unit

Transfer Credit: CSU; UC

Corequisite(s): ARCH 010A

Recommended Preparation: *Enrollment in or completion of ARCH 011*

Development of two- and three-dimensional drawing concepts, principles and techniques using mechanical and digital methods. Critically examine an iconic work of architecture through hand drawn orthographic parallel and perspective drawings as well as state of the art two-dimensional CAD drawing and three-dimensional digital modeling and rendering. Study of presentation types and how they can be utilized to communicate architectural ideas using state of the art digital imaging/illustration/composition software. Development of skill sets required in corresponding design studio courses. Required field trips. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: *Audit, Letter Grade*

ARCH 012B VISUAL COMMUNICATIONS II (DIGITAL MEDIA)

3 unit

Transfer Credit: CSU; UC

Prerequisite(s): ARCH 010A and ARCH 012A

Corequisite(s): ARCH 010B

Development of advanced digital communications representation techniques using state of the art computer software including: two-dimensional drawing, three-dimensional digital model building, digital rendering and digital imaging/illustration/composition. A critical examination of iconic architecture using conceptual and analytical three-dimensional diagramming of architectural systems, concepts and theory. Development of skill sets required in design studio courses. Required field trips. Total of 18 hours lecture and 108 hours laboratory.

Grade Mode: *Audit, Letter Grade*

ARCH 013 ARCHITECTURAL PORTFOLIO PREPARATION

3 unit

Transfer Credit: CSU

Prerequisite(s): ARCH 010B and 012B

A study of advanced individual student architectural design projects for portfolio preparation. Development of individual student portfolios which emphasize student accomplishments, instructional objectives and unique portfolio content required by different accredited schools of architecture. Subsequent portfolio development for interviews in industry. Exploration and analysis of portfolio presentation principles and techniques. Development of digital portfolios using computer illustration, photo imaging and page layout programs. Evaluation of printing and binding techniques. Maximum credit for ARCH 013 and ARCH 100 is 3 units. Total of 36 hours lecture and 72 hours laboratory.

Grade Mode: *Audit, Letter Grade*

ARCH 014 MATERIALS AND PROCESSES OF CONSTRUCTION**2 unit***Transfer Credit: CSU***Recommended Preparation:** Enrollment in or completion of ARCH 020A

Hands on exploration of materials and methods of construction, properties, assembly and fabrication of basic construction materials as they relate to building design. Examination of historic and contemporary architecture focusing on building materials and structural systems as they relate to design concepts. Review of the basic types of governmental regulatory constraints that architects must understand to design a building. Analysis of the basic structural forces that operate on buildings. In depth examination of the sequential processes of construction of a building. Required field trips. Total of 18 hours lecture and 54 hours laboratory.

Grade Mode: Audit, Letter Grade**ARCH 020A ARCHITECTURAL DESIGN****6 unit***Transfer Credit: CSU; UC***Prerequisite(s):** ARCH 010B and ARCH 012B**Recommended Preparation:** Enrollment in or completion of ARCH 014

Exploration and development of concepts through architectural issues such as site, circulation, program, building structure and enclosure. Critical examination of architectural issues and ideas discussed in the context of student projects in the design studio. Application of critical structural and building material knowledge to architectural design projects. Required field trips. Total of 54 hours lecture and 162 hours laboratory.

Grade Mode: Audit, Letter Grade**ARCH 020B ARCHITECTURAL DESIGN****6 unit***Transfer Credit: CSU; UC***Prerequisite(s):** ARCH 014 and ARCH 020A

Development of principles and processes of architecture through more complex architectural design projects. Exploration of complex programmatic relationships through concepts. Comparative analysis of a broad range of architectural building types as they relate to student design projects. Examination of sustainability and environmental issues of climate and lighting and how these issues can be addressed as integral components of an architectural design solution. Field trips for active exploration of project sites. Required field trips. Total of 54 hours lecture and 162 hours laboratory.

Grade Mode: Audit, Letter Grade**ARCH 022A ARCHITECTURAL PRACTICE****5 unit***Transfer Credit: CSU*

Architectural drafting conventions. Relationship of drawings and their functions, schedules and related detail drawings. Preparation of working drawings for a wood frame building involving light framing and heavy timber construction. Total of 54 hours lecture and 108 hours laboratory.

Grade Mode: Audit, Letter Grade**ARCH 022B ARCHITECTURAL PRACTICE****5 unit***Transfer Credit: CSU***Prerequisite(s):** ARCH 022A

Continuation of architectural drafting involving more complex structural systems and materials. Preparation of working drawings for a structure involving steel reinforced concrete and unit masonry materials. Emphasis is on detailing. Total of 54 hours lecture and 108 hours laboratory.

Grade Mode: Audit, Letter Grade**ARCH 024A HISTORY OF ARCHITECTURE****3 unit***Transfer Credit: CSU; UC*

Development of architecture from Prehistory, through ancient Egypt, ancient Greece and ancient Rome to the end of the Medieval period. Development of ancient, traditional or indigenous architecture of India, Islam, China, Japan, Africa, and the Americas. Influence of geography, religion and socio-economic factors on architecture. Total of 54 hours lecture.

Grade Mode: Audit, Letter Grade**ARCH 024B HISTORY OF ARCHITECTURE****3 unit***Transfer Credit: CSU; UC*

Basis and development of modern architecture from the Renaissance to the present day. Influence of technological, ecological, environmental, and socio-economic factors on architecture. Trends in contemporary architecture and environmental design. Total of 54 hours lecture.

Grade Mode: Audit, Letter Grade**ARCH 070A WORK EXPERIENCE/INTERNSHIP IN ARCHITECTURE (PAID)****0.5-8 unit***Transfer Credit: CSU***Prerequisite(s):** Completion of one semester at Pasadena City College and completion of one course in major**Enrollment Limitation:** Instructor approval

Provides students on-the-job learning in a paid architecture position. Development of effective work habits, attitudes, and career awareness so as to enable students to become productive employees. Credit may be accrued at the rate of 0.5 to 8 units per semester. One unit of credit for each 75 hours of paid work experience.

Grade Mode: Letter Grade, Pass/No-Pass**ARCH 070B WORK EXPERIENCE/INTERNSHIP IN ARCHITECTURE (UNPAID)****0.5-8 unit***Transfer Credit: CSU***Prerequisite(s):** Completion of one semester at Pasadena City College and completion of one course in major**Enrollment Limitation:** Instructor approval

Provides students on-the-job learning in an unpaid architecture position. Development of effective work habits, attitudes, and career awareness so as to enable students to become productive employees. Credit may be accrued at the rate of 0.5 to 8 units per semester. One unit of credit for each 60 hours of unpaid work experience.

Grade Mode: Letter Grade, Pass/No-Pass