

ARCH 342 ARCHITECTURAL PRACTICE 3.2

2 Units, Required Lecture/Activity Course, Spring Quarter

DESCRIPTION:

Continuation of ARCH 341 content plus the concepts, methods and processes pertaining to the preparation of outline specifications, production of design development drawings, life safety, systems integration and cost estimating.
2 lectures, 2 activities.

Prerequisites: ARCH 341. Co-requisite ARCH 353.

LECTURE:**OBJECTIVES:**

The student will:

The design development of commercial, public use buildings in steel, masonry, and reinforced concrete construction.

Building performance requirements and the integration of primary building systems and components.

General principles of building circulation, mechanical, electrical, structural, acoustical, spatial, and life safety planning and integration concerns.

General practice principles and building code concerns necessary in design development and integration of primary systems.

Seek and find appropriate resources to aid in the design development of a building project (code criteria, manufacturers recommendations, industry standards, etc.)

Make preliminary determinations of the spaces and arrangements necessary for typical building services.

Demonstrate and communicate the integration of typical building support systems (structure, mechanical, lighting, space defining, circulation).

CONTENTS:

Lectures on the following topics; studio problems designed to allow application of lecture materials.

Architectural services, design development, resources, outline specifications.

Public health, safety and welfare, California Specific Codes.

Building performance mandates (spatial, thermal, air quality, acoustical, visual, building integrity) and integration principles.

Spatial performance, accessibility and egress, vertical and horizontal circulation.

Thermal and air quality performance, concerns in mechanical systems selection, planning and location

Acoustical performance, sound isolation and spatial comfort

Interior space planning and systems integration concerns, visual performance concerns and lighting integration

REQUIREMENTS & INSTRUCTIONS:

The activity portion of the course will involve exercises covering site planning and grading, framing, wall section and detail design development in steel, concrete and masonry construction and the design development of other key building features.

METHODS OF EVALUATION:

Three to four multiple choice quizzes and a final multiple choice and graphic open book/note exam are given in the lecture portion of the course. 50% (quizzes – 50%...Final 50%) of the grade from this lecture course and 50% from studio course.

REQUIRED TEXT

The Architects Studio Companion, Allen

Reference Text: Architectural Graphic Standards, Ramsey and Sleeper; Buildings at Risk: Seismic Design Basics for Practicing Architects; California State Accessibility Standards – Interpretive Manual, OSA; Fundamentals of Building Construction, Allen; Uniform Building Code, ICBO, 1997, Volumes 1 & 2; Architectural Detailing, Allen

ACTIVITY:**OBJECTIVES:**

The student will integrate:

Show an ability to apply principles taught in the lecture course.

General principles of building circulation, structural and mechanical systems, lighting, and life safety planning.

Knowledge of a range of range of building construction types (e.g., steel, masonry, and reinforced concrete) in the design development process

CONTENTS:

Design development of design studio projects (ARCH 352).

REQUIREMENTS & INSTRUCTIONS:

This activity course meets two times a week – 3 hours each, for a total of 6 hours a week.

The activity is 50% of the grade for ARCH 342 (and ARCH 342 lecture is 50%).

Evaluations are intended to reflect the faculty's judgment of: student competence in, and an obvious improvement to, their ability to create and analyze appropriate Architecture.

Observable and measurable knowledge, skills, working methods, reasoning, and analytical abilities are evaluated in accordance with those noted by the individual professors charged with teaching the class.

Subjective and unmeasurable aspects critical to the design process, such as values, appearance, appropriateness, and so forth, are subject to both criticism and judgment by the individual professors charged with teaching the class. Students are encouraged to develop their own bases for criticizing the work, and, are required to do so in classes. The development of the ability to criticize in a reflective, rigorous, and constructive manner is seen as a fundamental part of analysis, theory building, and for developing a basis for making professional judgments.