Number & Title of Course: ARCH 341 Architectural Practice 3.1 (lecture component).

Course Description: Continuation of Arch 242 plus the concepts, methods, and processes and building systems that pertain to the detailing and construction of large-scale steel and concrete structures. 2 lectures, 2 discussions.

Program Goals & Course Outcomes
- Make reasonable decisions based on an architectural understanding of ethics, diversity, and sustainability.
  - Understanding multiple narratives in the history of architecture and cultural norms in a variety of settings (A7).
- Understand and apply the technical aspects of architectural design, building systems and construction materials considering the environmental impact of such decisions.
  - Ability to design sites, facilities, and systems that respond to relevant codes and regulations while reflecting life-safety and accessibility standards (B3).
  - Ability to demonstrate the basic principles of structural systems as well as their selection and application (B5).
  - Understanding the selection and application of building envelope systems (B7).
  - Understanding the selection and application of building materials and assemblies (B8).
  - Understanding the selection and application of building service systems (B9).
- Synthesize a wide range of variables that contribute to an integrated design solution.
  - Understanding the research methods used during the design process (C1).

Student Performance Criteria Addressed
A7 History and Global Culture
B3 Egress and Accessibility
B5 Structural Systems
B7 Building Envelope Systems and Assemblies
B8 Building Materials and Assemblies
B9 Building Service Systems
C1 Research

Topical Outline
History and theory of building technology (20%)
Steel building systems (20%)
Concrete building systems (20%)
Envelope and enclosure (10%)
Mechanical systems (10%)
Circulation and egress (10%)
Contemporary practice (10%)

Prerequisites: ARCH 242 and ARCH 253. Corequisite with ARCH 351.

Textbooks/Learning Resources

Offered: Fall annually.

Faculty Assigned: Mark Cabrinha (Associate Professor) and Stephen Phillips (Associate Professor).