

ARCH 242: BUILDING CONSTRUCTION

Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	3
Total Contact Hours:	72
Lecture Hours :	54
Lab Hours:	18
Hours Arranged:	0
Outside of Class Hours:	108
Prerequisite:	ARCH 110.
Strongly Recommended:	ENGL 101.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter

Catalog Course Description

An overview of construction, building components, and systems investigated through case studies. Explore architectural basic construction materials, methods of construction, properties, assembly and fabrication. Examine various architecture by focusing on its building materials and structural systems as they relate to design concepts. Review the basic types of governmental regulatory constraints that architects must understand to design a building. Analyze structural forces affecting buildings. Examine in depth the sequential processes of constructing a building. 54 lecture hours, 18 lab hours.

Course Objectives

- examine skills necessary to assess a variety of existing construction types. Communicate knowledge of these skills through written, verbal and drawing presentations.
- compare and contrast the different types of construction and make drawings of elements of different types of construction.
- identify the responsibilities of architects and engineers, and technicians in the preparation of working drawings and constructions.
- demonstrate the ability to distinguish specific Building Construction and design principles as they relate to industry standards.
- demonstrate skills necessary to design a variety of existing construction types.
- demonstrate the ability to distinguish specific building construction and design principles as they relate to industry standards.

Major Course Content

An overview of construction, building components, and systems investigated through case studies. Explore Architectural basic construction materials, methods of construction, properties, assembly and fabrication.

1. THE BUILDING SITE
2. THE BUILDING
3. FOUNDATION SYSTEMS

4. FLOOR SYSTEMS
5. WALL SYSTEMS
6. ROOF SYSTEMS
7. MOISTURE & THERMAL PROTECTION
8. DOORS & WINDOWS
9. SPECIAL CONSTRUCTION
10. FINISH WORK
11. MECHANICAL & ELECTRICAL SYSTEMS
12. NOTES ON MATERIALS

Lab Content

Explore Architectural basic construction materials, methods of construction, properties, assembly and fabrication.

1. THE BUILDING SITE
2. THE BUILDING
3. FOUNDATION SYSTEMS
4. FLOOR SYSTEMS
5. WALL SYSTEMS
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Suggested Reading Other Than Required Textbook

Teacher hand outs

Examples of Required Writing Assignments

Writing assignments outside of the regular class time: answer questions, write essays, research papers, lab reports, and journals.

Example: Write descriptions for presentation boards explaining the construction process.

Examples of Outside Assignments

Solve problems Building Construction and design principles as they relate to industry standards.

Develop sectional models.

Practice skills - Building Construction presentation boards and model making.

Study - Building Codes and research for presentation boards.

Observe critiques presentations. Research projects.

Students will be required to complete the following types of assignments outside of the regular class time: draw, study, answer questions, practice skills, read required materials, solve problems, write essays, research papers, lab reports, and journals. Students will also observe activities related to course content, participate in activities related to course content.

DEGREE APPLICABLE COURSE: 2 hours of independent work done out of class per each hour of lecture or class work, or 3 hours lab, practicum, or the equivalent, per unit.

Instruction Type(s)

Lab, Lecture, Online Education Lab, Online Education Lecture