COURSE CNM111

Construction Plan Reading and Specifications

Course Overview

It is crucial for anyone involved in construction projects to have the ability to read and understand building plans and specifications. Whether you’re in the field or in the office, you need to know how the site plan affects the building plan, what building departments look for in plan checks, and how plans affect contracts.

This course is a paced-asynchronous course, which means that all students will be proceeding through the course at the same time. The course consists of online course materials, reading assignments, written assignments and discussion forums. The lessons open on a weekly basis throughout the quarter. The time it takes you to complete each lesson depends on your individual approach and learning style. Lesson presentations vary in length and you will spend time working on your assignments, reading, and interacting with classmates in the discussion forums.

Instructor

Hitesh Dewan

Hitesh Dewan is a construction and technology operations manager, with over a decade of experience in the construction industry. Hitesh has built a reputation for developing and implementing company-wide initiatives that help departments improve their process flow and potential. With a demonstrated history of working across a variety of market sectors in the construction industry, Hitesh is often invited to be a guest speaker or lecturer for various industry organizations and technology panels, including DBIA, CFMA, SRBX and more. He is currently the Technology Integration Director for Roebbelen Contracting, Inc.

Course Outline/Topics Agenda

- The Purpose, Process, People and Plans
- Plans, Lines and Symbols
- Construction Materials and Specifications
- General, Civil, Landscape and Architectural Sheets
- Structural, Mechanical, Electrical, Plumbing & Fire Sprinkler Disciplines
- Trade Coordination and Finishes
- Keynotes, Details & Elevations
- Construction Documentation
- As-Builts & Project Closeout
Course Outcomes

- By the end of this course, students will be able to do the following:
  - Analyze complex plans, identify specifications and scope of use, and organize construction assembly details.
  - Illustrate how construction plans are organized under the Uniform Drawing System with emphasis on showing the 8 Specification Modules set forth by the Construction Specifications Institute.
  - Apply Specification Divisions from the American Institute of Architects (AIA) to plan organization and reading, field utilization and project management applications.
  - Demonstrate building code compliance by accessing information from plans and specifications.
  - Examine “The Alphabet of Lines” and its application to plans and drawings, plans symbols and abbreviations.
  - Design Construction cost estimates utilizing plan reading ability, application of knowledge of construction materials types and uses for bid accuracy.
  - Integrate select application of plan reading, specifications, and assemblies by various shareholders and agencies.
  - Develop ability to read complex construction plans and design specifications.

Time Commitment

This course is offered for 3 quarter units of academic credit. As a general rule, plan on spending about 5-6 hours online each week, plus 5-6 hours of work outside of class on readings and assignments.

Readings


*Textbooks may change. Please refer to this course on the website for the most updated information.

Grading Criteria

This course includes discussion questions, simple learning activities, quizzes, and more complex assignments designed to provide a measure, for both you and me, of your progress and evaluation of your learning through the course. The grading breakdown is as follows:

- Assignments and Activities 30%
- Quizzes – 30%
- Final Project – 40%

Applying coursework toward a certificate requires a grade of C or better, unless otherwise noted.

Want to learn more about our Construction Plan Reading and Specifications program? Talk to an enrollment coach!

Cathy Zhao
Call: (530) 752-9046
Email: ycazhao@ucdavis.edu
Schedule a consultation: https://calendly.com/cathyyzhao