



Course Outline

2026-2027 Catalog

DFT 4 - Print Reading for Construction and Architecture

Catalog Description

Transfer Status: CSU

Unit(s): 3.00

Lecture: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

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Course Description: Students will learn to read and interpret drawings and specifications used in construction and architectural applications. Topics include line types, views, dimensions, symbols, sketching, materials, specifications, and estimating. Students will use construction prints, drawings and specifications including residential and non-residential applications.

Objectives

Upon successful completion of this course, the student should be able to:

1. Interpret and describe the technical information provided on construction drawings.
2. Apply the "alphabet of lines" to interpret meaning in construction prints and sketches.
3. Apply sketching and lettering skills to communicate meaning in construction and architecture.
4. Differentiate information contained in plans, elevations, sections and details.
5. Read construction specifications and describe materials, methods of construction, project details, legal and code requirements contained therein.
6. Prepare an estimate of material quantities and costs from an assigned construction print and specification set.

Course Content

Topic Titles / Suggested Time Topic	
	<u>Lecture</u>
<u>Topics</u>	<u>Lec Hrs</u>
Construction Drawing Organization	3.00
Line Types, Symbols, Views, Dimensioning	3.00
Orthographic and Pictorial Views and Sketching Applications	6.00
Construction Materials, Specifications and Standards	6.00
Plot Plans, Foundation and Floor Plans	6.00
Framing Plans, Details and Sections	6.00
Plumbing and Electrical Plans	4.00
Heating, Ventilation and Air Conditioning (HVAC) Plans	4.00
Estimating Construction Material Quantity and Cost	4.00
Plan Set Advanced Project	6.00
Construction Math Applications and Measurement	3.00
Total Hours: 51.00	

Methods of Instruction

- A. Class Activities
- B. Collaborative Group Work
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Lecture
- E. Reading Assignments

Methods of Evaluation

- A. Exams/Tests
- B. Quizzes
- C. Projects
- D. Homework
- E. Class participation
- F. Written Assignments

Examples of Assignments

Reading Assignments

1. Read Unit 6: Pictorial Views and Sketches and be prepared to discuss in class.
2. Read Unit 7: Construction Specifications and be prepared to discuss in class groups.

Writing Assignments

1. Complete the Unit 6: Specifications and Building Codes "Test Your Knowledge" questions and submit them to the instructor. Use one to two complete sentences per each answer.
2. Complete the Unit 9: Architectural Drawings residential building project activity in the textbook and submit it to the instructor. Use one to two complete sentences per each answer.

Out-of-Class Assignments

1. Research the use of plastic (polybutylene) pipe in home construction. Answer the following: What were the essential elements of the case and how many homes were affected? Why is polybutylene pipe a problem in construction? Submit directly to the instructor.
2. Complete the math review at the end of Unit 2: Construction Math (all problems in the shaded boxes). Be prepared to review during the next scheduled class.

Recommended Materials of Instruction

Brown W. and Dorfmueller D. (2023). Print Reading for Construction. *Goodheart-Willcox Company, Inc., 8th.* 9781649259851.

Minimum Qualifications

Engineering (Masters Required)

Drafting

Construction Technology

Created/Revised by: Dahlgren, John

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