

Virginia Western Community College
BLD 111
Blueprint Reading and Building Code

Prerequisites

None.

Course Description

Introduces reading and interpreting various kinds of blueprints and working drawings with reference to local, state and national building codes.

Semester Credits: 3 Lecture Hours: 2 Lab/Clinical/Internship Hours: 2

Required Materials**Textbook:**

Print Reading for Construction: Residential. 7th edition. ISBN#: 9781631269226.

Other Required Materials:

None

Course Outcomes

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

- Understand the purpose and use of prints, specifications and building codes.
- Successfully read a set of blueprints with specifications and determine how the architect or engineer wanted the building to be constructed.
- Successfully make quantity take offs and feel comfortable finding items and answering questions regarding the prints, specifications and codes.
- Check the prints with the codes for errors or discrepancies.
- Determine what materials are to be used and how and where these materials are to be used in the construction.
- Develop vocabulary and knowledge necessary to read and interpret blueprints, specifications and the building codes.
- Understand the relationship of the drawn/written descriptions to the actual construction.
- Effectively communicate with others in the construction industry.

Topical Description

Week	Date	Topic	Text Reading	Test Schedule
1	8/24	Class Introduction, syllabus, course outline, campus safety information. Purpose of drawings, specifications and building codes. A/E and contractor's organizations.		
2	8/31	History of blueprinting & reprographics; hand drafted vs. CAD drafted drawings. Basic organization of drawings and specifications. Content titles, organization of information and using cross referencing symbols.	Unit 1	
3	9/7	Math for construction; calculating dimensions, reading/use of dimensions, and reading/use of scales. <i>Project preparation.</i>	Units 2 & 3	
4	9/14	Lines, symbols and fundamental drawing practices. Use and purpose of plans, elevations, sections, details and schedules.	Units 4 & 5	
5	9/21	Site Plans: Site development, zoning, property lines, site preparation, topography, soils, and stormwater management.	Unit 8; Zoning Handout	Test 1 Passed Out
6	9/28	Architectural Prints. <i>Project preparation.</i>	Unit 9	Test 1 DUE
7	10/5	Building Codes (practically nothing in Unit 6 text).	Code Handouts	
8	10/12	Construction Materials.	Unit 7	
9	10/19	Specifications. <i>Project preparation.</i>	Unit 6; Spec Handouts	
10	10/26	Foundations Prints: Various types and considerations.	Unit 10	Test 2 Passed Out
11	11/2	Structural Prints (Commercial); Welding Prints (Commercial)	Units 11 & 16	<u> </u> ² <u> </u> _E

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Week	Date	Topic	Text Reading	Test Schedule
12	11/9	Residential Framing Prints (including Wall & Roof Framing, and Stairs). <u>Project preparation.</u>	Unit 12	
13	11/16	Plumbing & HVAC	Units 13 & 14	
14	11/23	<i>Thanksgiving Break</i>		
15	11/30	Electrical and Schedules; Construction Cost Estimating	Unit 15 & 17; Handouts	
16	12/7	Assignment - <i>Written and Oral Class Projects DUE.</i>		
17	12/14	Final Exam (In class)		Test 3

Notes to Instructors

- None.