



Broward Community College

Course Outline

STATUS: A

COMMON COURSE NUMBER: BCN 1272

COURSE TITLE: Building Construction Plans Interpretation

CREDIT HOURS: 2

CONTACT HOURS BREAKDOWN:

Lecture/Discussion 32

Lab

Other

Contact Hours/Week 2

CATALOG COURSE DESCRIPTION:

Prerequisite: None

Corequisite: None

This course is designed to provide an overview of construction documents and to develop the student's ability to quickly interpret working drawings. Emphasis is on architectural and structural details with limited coverage on mechanical and electrical aspects.

General Education Requirements - Associate of Arts Degree, meets Area(s):
 General Education Requirements - Associate in Science Degree, meets Area(s):

UNIT TITLES:

1. Design Process and Blueprints
2. Scales, Lines, Symbols
3. Plans, Elevations, Section Detail
4. Civil Drawings and Site Plan Interpretation
5. Foundation Plans Interpretation
6. Structural Plans Interpretation
7. Analysis of External Material Finishes
8. Internal Finishes and Building Schedule Interpretation
9. Mechanical, Electrical, and Plumbing
10. Problems with Blueprints

I. Course Overview:

Upon successful completion of this course, the students should be able to demonstrate an ability to interpret basic construction drawings in accordance with accepted professional standards.

II. Units:

Unit 1. Design Process and Blueprints

General Outcome:

- 1.0 The students should be able to understand in general terms the design process, the role of design professionals, and how blueprints are used to convey the design.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Have a basic understanding of the design process and be able to identify the stages of the design process.
- 1.2 Have a basic understanding of how blueprints/drawings are used to convey design intent.
- 1.3 Understand the relationship between architectural, structural, civil, mechanical, and electrical blueprints.

Unit 2. Scales, Lines, Symbols

General Outcome:

2.0 The students should be able to recognize the symbols, drawing techniques, and details used in the documents.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Recognize the symbol and what they are used for.
- 2.2 Recognize construction details and what they represent.
- 2.3 Understand the differences between hand drafting and CAD drawing.

Unit 3. Plans, Elevations, Section Detail

General Outcome:

3.0 The students should be able to demonstrate proficiency in the interpretation of plans, sections, elevations and details.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

3.1 Understand the use of plans and what they convey.

3.2 Understand what elevations are used to convey.

3.3 Understand how building sections are used to convey design, and the different kinds of sections.

Unit 4. Civil and Site Plans

General Outcome:

- 4.0 The students should be able to demonstrate a basic ability to identify and interpret basic construction site and civil plans.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Identify elevation and setback requirements for residential buildings and small structures.
- 4.2 Identify the differences between easements, setbacks, ordinances and variances and their relationships with site plans.
- 4.3 Interpret surveys and property legal descriptions.
- 4.4 Interpret civil plans, landscape, and irrigation plans, and describe what they convey.

Unit 5. Analysis of Material Finishes

General Outcome:

5.0 The students should be able to demonstrate proficiency in the interpretation of structural finish concepts and its relationship with architectural specifications.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 5.1 Describe the different types of exterior finishes.
- 5.2 Describe the different types of interior finishes.
- 5.3 Describe the effects that weather has on exterior finishes.