Broward Community College
Course Outline

STATUS: A

COMMON COURSE NUMBER: FFP 2521

COURSE TITLE: Construction and Plans Examination

CREDIT HOURS: 3

CONTACT HOURS BREAKDOWN:

Lecture/Discussion	45
Lab	00
Other	00
Contact Hours/Week	3

CATALOG COURSE DESCRIPTION:

Prerequisite: None

Co requisite: None

Applies the previous three weeks training in group blueprint reading and plans examination. The student will review actual building plans, and with use of the codes, standards and inspection techniques, find errors and omissions, make corrections according to the code and locate wherein the code each item is located.

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

UNIT TITLES:

1. Present Use of Construction Drawings
2. Pictorial Drawings
3. Reading Scales and Dimensions
4. Residential Working Drawings
5. Heating and Cooling Plants
6. Specifications
7. Commercial Buildings

I. Course Overview:

Upon successful completion of this course, the students should be able to use the principles of construction drawings to review plans aimed toward fire safety.

II. Units:

Unit 1. Present Use of Construction Drawings

General Outcome:

1.0 The students should be able to familiarize himself with development and use of construction plans.

Specific Learning Outcomes:

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

1.1 Read drawings as a means of communication.

1.2 Analyze the regional variations of drawings.

1.3 Read the different types of construction drawings.

1.4 Discuss how various types of prints are made.

1.5 Define loads as they pertain to construction.

Unit 2. Pictorial Drawings

General Outcome:

2.0 The students should be able to discuss the background principles of construction and drawings.

Specific Learning Outcomes:

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

2.1 Determine the meaning of lines on drawings.

2.2 Use construction mathematics.

2.3 Decipher symbols used on working drawings.

2.4 The student will understand the glossary of construction terms.

2.5 Explain the abbreviations used on working drawings.

Unit 3. Reading Scales and Dimensions

General Outcome:

3.0 The students should be able to discuss and use the basic principles of dimensions.

Specific Learning Outcomes:

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

3.1 Discuss conventional dimensions of floor plans, masonry, wood frame, brick veneer and brick cavity.

3.2 Explain modular dimensions.

3.3 Convert metric dimensions.

3.4 Recognize the various types of building construction.

3.5 Use related construction terms.

Unit 4. Residential Working Drawings

General Outcome:

4.0 The students should be able to orient themselves to residential plans.

Specific Learning Outcomes:

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

4.1 Survey plats and plot plans.

4.2 Read foundation plans.

4.3 Discuss the principles of floor plans.

4.4 Discuss the elevation of topography.

4.5 Read section drawings and details and interior elevations.

Unit 5. Heating and Cooling Plants

General Outcome:

5.0 The students should be able to read heating and cooling plans.

Specific Learning Outcomes:

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

5.1 Explain a forced hot air system.

5.2 Explain a hot water heating system.

5.3 Explain a radiant heating system.

5.4 Explain a hot air heating system.

5.5 Explain cooling systems.

5.6 The student will understand the function of plumbing plans.

5.7 The student will understand the function of electrical plans.

Unit 6. Specifications

General Outcome:

6.0 The students should be able to prepare written specifications of working drawing to supply the technical description and construction techniques.

Specific Learning Outcomes:

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

6.1 Explain how specifications relate to drawings.

6.2 Discuss how information is arranged in specifications.

6.3 Describe the Construction Specification Institutes (CSI) format.

6.4 Find information in specifications.

Unit 7. Commercial Buildings

General Outcome:

7.0 The students should be able to understand the features of commercial and industrial buildings classified as heavy construction.

Specific Learning Outcomes:

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

7.1 The student will be able to identify and understand the construction features of bearing walls.

7.2 The student will understand the principles of reinforced concrete.

7.3 The student will understand and recognize the construction principles of steel frame construction.

7.4 The student will recognize and understand the principles of heavy timber construction.

7.5 The student will be able to understand general structural drawings.

7.6 The student will be able to recognize and understand computer applications to drawings.