### **ARCH 56 Course Outline as of Fall 2016**

## **CATALOG INFORMATION**

Dept and Nbr: ARCH 56 Title: INTRO TO ARCH DRAFTING Full Title: Introduction to Architectural Drafting Last Reviewed: 4/6/2009

| Units   |      | Course Hours per Week |      | Nbr of Weeks | <b>Course Hours Total</b> |       |
|---------|------|-----------------------|------|--------------|---------------------------|-------|
| Maximum | 1.50 | Lecture Scheduled     | 1.00 | 17.5         | Lecture Scheduled         | 17.50 |
| Minimum | 1.50 | Lab Scheduled         | 1.50 | 8            | Lab Scheduled             | 26.25 |
|         |      | Contact DHR           | 0    |              | Contact DHR               | 0     |
|         |      | Contact Total         | 2.50 |              | Contact Total             | 43.75 |
|         |      | Non-contact DHR       | 0    |              | Non-contact DHR           | 0     |

Total Out of Class Hours: 35.00

Total Student Learning Hours: 78.75

| Title 5 Category: | AA Degree Applicable                          |
|-------------------|---|
| Grading:          | Grade Only                                    |
| Repeatability:    | 00 - Two Repeats if Grade was D, F, NC, or NP |
| Also Listed As:   |   |
| Formerly:         |   |

### **Catalog Description:**

This manual drafting course will introduce the student to the primary types of architectural working drawings. Using a simple wood frame structure, the student will produce an abbreviated set of drawings including: floor plan, foundation and floor framing plan, roof framing plan, cross and/or longitudinal sections, and selected details.

### **Prerequisites/Corequisites:**

Course Completion or Current Enrollment in APTE 45 ( or APTECH 45 or APTECH 55 or IED 55)

### **Recommended Preparation:**

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: This manual drafting course will introduce the student to the primary types of architectural working drawings. Using a simple wood frame structure, the student will produce an abbreviated set of drawings including: floor plan, foundation and floor framing plan, roof framing plan, cross and/or longitudinal sections, and selected details. (Grade Only)

Prerequisites/Corequisites: Course Completion or Current Enrollment in APTE 45 ( or APTECH 45 or APTECH 55 or IED 55) Recommended: Limits on Enrollment: Transfer Credit: Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

| AS Degree:<br>CSU GE: | Area<br>Transfer Area | Effective:<br>Effective: | Inactive:<br>Inactive: |
|-----------------------|-----------------------|--------------------------|------------------------|
| <b>IGETC:</b>         | Transfer Area         | Effective:               | Inactive:              |
| CSU Transfer          | : Effective:          | Inactive:                |                        |
| UC Transfer:          | Effective:            | Inactive:                |                        |

### CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

# **COURSE CONTENT**

### **Outcomes and Objectives:**

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

- 1. Summarize the theory, practice and application of wood frame construction.
- 2. Demonstrate comprehension by:
  - a. Generating a floor plan drawing.
  - b. Generating a foundation and floor framing plan drawing.
  - c. Generating a roof framing plan drawing.
  - d. Generating a cross and/or longitudinal section drawing.
- 3. Identify common code requirements for each drawing type.

## **Topics and Scope:**

- 1. Elements of a floor plan
  - a. Plan view of walls
  - b. Openings in walls
    - 1. doors, windows, etc.
    - 2. built-in items

c. Introduction to related code requirements and drawing conventions

- 2. Elements of a foundation and floor framing plan
  - a. Plan view of wood framed floor components
  - b. Concrete slab components, from the bottom of the footing to the top of the floor
  - c. Introduction to related code requirements and drawing conventions
- 3. Elements of a roof framing plan
  - a. Plan view of wood frames roof components, from the support below

ceiling/roof to the top of the ridge

b. Introduction to related code requirements and drawing conventions

- 4. Elements of section drawings
  - a. Section view of foundation, floor, and roof elements at one and/or two locations on building
  - b. Views perpendicular to each other
  - c. Introduction to related code requirements and drawing conventions

### Assignment:

- 1. The same simple wood frame structure will be used for all manual drawing assignments:
  - a. Draw a floor plan from provided reference material.
  - b. Draw a foundation and floor framing plan from provided reference materials
  - c. Draw a roof framing plan from provided reference materials.
  - d. Draw a cross and/or longitudinal section from provided reference materials.
- e. Draw selected details from provided reference materials.
- 2. 4 quizzes and 1 final exam (objective examinations).
- 3. Reading assignments 15 30 pages per week.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Drafting assignments

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Drafting assignments

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, objective examinations (multiple choice, true/false, matching items, completion and problem solving) Writing 0 - 0%

Problem solving 15 - 30%

Skill Demonstrations 50 - 65%

> Exams 15 - 30%

Class participation

Other Category 5 - 10%

### **Representative Textbooks and Materials:**

Huan, Larry, et. al. Habitat for Humanity, How to Build a House. Taunton Press, Inc. 2008.

Instructor prepared materials.