

ARC 220
ADVANCED ARCHITECTURAL CAD

COURSE DESCRIPTION:

Prerequisites: ARC 114

Corequisites: None

This course provides file management, productivity, and CAD customization skills. Emphasis is on developing advanced proficiency techniques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands. Course Hours Per Week: Class, 1. Lab, 3. Semester Hours Credit, 2.

LEARNING OUTCOMES:

A student who successfully completes this course should be able to:

- a. Set up the CAD environment for increased efficiency.
- b. Import construction details of varying scales to single sheets.
- c. Create a total construction plan package.

OUTLINE OF INSTRUCTION:

- I. Establishing the CAD environment
 - A. Selecting architectural units
 - B. Determining limits
 - C. Layer protocols
 - D. Managing data

- II. Establishing the architectural construction technology
 - A. Selecting architectural construction details
 - B. Drawing a two-story wall section
 - C. Drawing a single-run staircase in section
 - D. Decks
 - E. Layer assignments

- III. Conceiving the floor plan (space planning)
 - A. Lower level
 - B. Upper level
 - C. Staircase location

- IV. Drawing the floor plan(s)
 - A. Requirements and limitations
 - B. Layer Assignments
 - C. Drawing sequence
 - D. Dimensions and notes

- V. Drawing the elevations
 - A. Drawing the end elevation
 - B. Establishing vertical heights
 - C. Drawing the front elevation
 - D. Drawing the rear elevation

- VI. Composing the plan package
 - A. Drawing hardcopy (the sheets)
 - B. Merging drawings of different scales
 - C. Data management
 - D. Plotting/scanning options