COURSE DESCRIPTION

Prerequisites: None
Corequisites: None

This course introduces basic drafting practices used in residential and light commercial design. Topics include floor plans, foundations, details, electrical components, elevations, and dimensioning practice. Upon completion, students should be able to complete a set of working drawings for a simple structure. Course Hours Per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

COURSE OBJECTIVES:

a. Use architectural drafting tools.
b. Dimension architectural drawings.
c. Identify electrical symbols in architectural drawings.
d. Complete a set of working architectural drawings.

OUTLINE OF INSTRUCTION:

A. Defining the project
   1. Occupancy and function
   2. Floor space
   3. Residential building code requirements

B. Creating the floor plan
   1. Use of drafting tools
   2. Laying out partitions
   3. Drawing windows and doors
   4. Drawing fixtures
   5. Dimensioning

C. Creating the wall section
   1. Establishing the construction type
   2. Drawing the foundation section
   3. Drawing the floor framing section
   4. Drawing the wall section
   5. Drawing the roof-eave detail
   6. Labeling

D. Creating the foundation plan
1. Drawing the exterior foundation
2. Locating the girder
3. Locating the piers
4. Drawing double joists
5. Drawing vents and crawl space door
6. Dimensions and labels

E. Drawing exterior elevations
   1. Establishing vertical heights from grade
   2. Projecting offsets from right side floor plan
   3. Establishing eave and roof pitch on side elevation
   4. Projecting offsets from front elevation
   5. Projecting doors and windows

F. Drawing a site plan
   1. Drawing lot boundaries
   2. Setbacks
   3. Drawing the structure footprint
   4. Dimension and label

G. Drawing mechanical plans
   1. Electrical plans
   2. Plumbing plans

REQUIRED TEXTBOOKS AND MATERIALS:

Architectural Drafting Tools
Text: As indicated on course syllabus

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 919-536-7207, ext. 1413 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1209.