

SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Building Construction Technology Program
Revision Date: August 23, 2021

I. CATALOG DESCRIPTION

Course Number: CNST2634
Course Title: Commercial Construction Drafting
Prerequisite(s): CNST1326 or by Permission
Catalog Description: Study of light commercial structures and methods of construction. Requirements of the International Building Code. Construction materials and methods. Methods of graphic representation for each drawing. Drawing and representation of commercial structures and preliminary information provided by instructor, but student bears more responsibility for planning design than in earlier drafting courses. Use of the International Building Code for floor plan design and the interrelationship of drawings and information for a set of construction drawings is included. Fundamentals of computer-aided drafting using Revit. Draw, edit and print a light commercial set of plans.
Credit Hours: 2.5
Class Hours: 23
Lab Hours: 45
Total Contact Hours: 68

II. COURSE OBJECTIVES: *Course will:*

- A. Select and create schedules, appropriate windows, doors, frames, and room finishes.
- B. Demonstrate how to draw to scale a complete floor plan, basement/foundation plan, section and details.
- C. Identify and list construction drawings required for a light commercial structure.
- D. List the general requirements for the completion of the drawings.
- E. Using the *Uniform Building Code* book, make decisions about allowable floor square footage size, construction materials, occupancy group, maximum height, required fire protection in exterior walls, and acceptable design of area separation walls.
- F. Identify different types of doors and windows and corresponding door and window frames.
- G. Identify all symbols, list all required information, and correct drawing procedures for a light commercial floor plan and footing, foundation plan, section views, elevation views and details.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Interpret codes and their relationship to construction.
 - 2. Complete window and door schedules.
 - 3. Calculate stair data stairwell openings.
 - 4. Draw a commercial floor, foundation plan, elevations and details.
 - 5. Dimension with symbols, notes and related construction to their drawings.
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #3: Critical Thinking & Problem Solving
Outcome 5: Acquire and integrate knowledge and construct relationships across disciplines.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A.** Schedules
 - 1. Door, window, hardware, fixture and appliance, specific writing, room finish
- B.** Floor Plan
 - 1. Layout, plan identifications, material symbols, graphic representations and standards
- C.** Basement/Foundation Plan
 - 1. Layout, plan identifications, material symbols, graphic representations and standards
- D.** Construction Details
 - 1. Transverse and longitudinal sections, construction details
- E.** Elevations
 - 1. Exterior and interior
- F.** Site Visitation
 - 1. Visit light commercial construction sites to gather ideas

V. INSTRUCTIONAL MATERIALS

- A.** Required Text(s): None
- B.** Supplies: Calculator and Architect's scale

VI. METHODS OF PRESENTATION/INSTRUCTION

- A.** Methods of presentation typically include a combination of the following:
 - 1. Hands-on lab projects
 - 2. Lab assistance
 - 3. Video presentation
 - 4. PowerPoint presentations
 - 5. Speaker(s)
 - 6. Field Trip(s)
 - 7. Instructional handouts

VII. METHODS OF EVALUATION

- A.** Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1. Tests and Quizzes
 - a. Complete tests and quizzes on assigned due date
 - b. Points are deducted if a test or quiz is not completed on the assigned due date
 - c. Assigned due dates are provided
 - 2. Assignment Sheets
 - a. Define tests and quizzes
 - b. States when test and quiz assigned due dates are
 - c. States the number of points each test or quiz is worth
 - 3. Review sheets and class discussions are provided prior to each test and quiz.
 - 4. Evaluation will be based on the number of points earned from the total points possible
 - 5. Drawings (40% of final grade)
 - a. Floor plan
 - b. Foundation plan
 - c. Construction Details
 - 6. Drawings Grade
 - a. Graded individually
 - b. Criteria for each drawing is listed on the assignment sheet
 - c. Due dates are provided with assignment

- d. Complete projects on time
- e. Points are deducted if a project is late
- f. Based on the accumulated points for correct information divided by the total possible points for the drawing
- g. Total possible points for each drawing is listed on the assignment sheet
- 7. Lab Performance Evaluation (22%)
 - a. Problem solving and decision making (40% of lab performance evaluation)
 - b. Initiative and leadership (20%)
 - c. Work ethic, organization, time management, attendance, and attitude (20%)
 - d. Speed and accuracy (20%)
- 8. General Criteria (20%)
- 9. Quantity of Drawings (18%)
- 10. Design and Performance (10%)

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Student must meet all of the following to receive a passing grade:
 - 1. Achieve a passing grade of “C” (70%) or higher, based on SCC grading scale.
 - 2. Submit own work. Students turning in homework, reports, field notes, or calculations by someone other than themselves will receive 0% and be referred to the Division Dean and Dean of Students for further disciplinary action. Consequences can include failing the course.
 - 3. Demonstrate attitude, skills, and character commensurate with industry standards.
 - 4. All program policies of the Building Construction Technology program will be strictly enforced.
 - 5. Intentional damage to college property will not be tolerated and may result in punitive action, such as being removed from the program.
 - 6. All cell phones will be turned off during class/lab time. If this becomes a problem, the instructor may consider the delinquent student absent.