



South Central College

BDET 1110 Studio I

Course Outcome Summary

Course Information

Description	This is an introductory studio course for students interested in Building Design and Energy Technology. Studio I includes a combination of sketching and electronic drawing software applications. This course will cover, sketching techniques, dimensions, notations, organization, & measuring. This class advances into drawing a commercial wood-frame construction project while incorporating electronic drawing software into the design process. (Prerequisites: None)
Total Credits	4
Total Hours	96

Types of Instruction

Instruction Type	Credits/Hours
Lecture	
On-Campus Lab	

Pre/Corequisites

None

Institutional Core Competencies

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Understand the definition of design.

Learning Objectives

- Research the history of design.
- Compare and contrast different architectural design periods.
- Compare and contrast building design.

2. Understand the use of principles and elements of design.

Learning Objectives

- Define types of media used.

Define the various sizes of media used.
Describe the drafting tools.
Demonstrate proper use of drafting tools.

3. Draw using correct line types and weights.

Learning Objectives

Create linework that has various line types.
Create linework that has various lineweights.
Define the "Alphabets of Lines".
Draft using the "Alphabets of Lines".

4. Create sketches based on specific criteria.

Learning Objectives

Create orthographic sketches.
Create isometric sketches.
Sketch on various types of media.
Sketch to specific scales.

5. Demonstrate an understanding of the criteria that defines the building envelope.

Learning Objectives

Demonstrate the location of a building envelope.
Describe the use of different types of insulation.
Sketch various wall design assemblies.
Demonstrate foundation design.
Demonstrate the understanding of roof design.
Understand habitable and non-habitable spaces.

6. Draw architectural-style lettering, leaders, and dimensions.

Learning Objectives

Draft hand lettered single-stroke Gothic lettering.
Draft hand lettered architectural specific dimensions.
Draw hand lettered architectural specific leaders.

7. Demonstrate an understanding of drawing/sketching principles to help solve problems.

Learning Objectives

Sketch details.
Incorporate line division.
Sketch using proportions.

8. Demonstrate the understanding of as-built drawings.

Learning Objectives

Describe the process of completing existing drawings
Demonstrate sketching layout of existing conditions.
Understand the building components to be included on as-built drawings
Understand the unit of measure.

9. Demonstrate an understanding of symbols that represent various commercial construction materials.

Learning Objectives

Demonstrate architectural symbol knowledge in plan view.
Draw material hatching in section views.
Label materials in section views.
Use callouts for plan coordination.

10. Construct building design working drawings.

Learning Objectives

Define architectural working drawings.
Prepare floorplans.

Draft elevations.
Draw sections.

11. Coordinate a set of commercial working drawings.

Learning Objectives

Identify what information is necessary for coordination of architectural working drawings.
Establish drawing standards.
Prepare drawings incorporating callouts.

12. Acquire an understanding of architectural , MEP and structural drawings and construction methods.

Learning Objectives

Draw a foundation plan. (Project Specific)
Draw a floor plan. (Project Specific)
Draw elevations. (Project Specific)
Draw sections and details.(Project Specific)
Define the different methods of construction used in residential construction.
Provide a set of coordinated working drawings. (Project Specific)

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: www.southcentral.edu/disability

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