

SPOKANE FALLS COMMUNITY COLLEGE

Course Learning Objectives Student Learning Outcomes

Course Title: Computer Aided Design II
Prefix and Course Number: INTDS 286

Last Modified: F17

Course Learning Objectives

1. Drawing the 3D Furniture Installation Plan
 - A. Objectives:
 - a. Introduce 3D walls, windows, doors, and components
 - b. Understand 3D views and camera commands to create 3D perspective wire frames
 - B. Tutorial 9-1: 3D Tenant Space Furniture Installation Plan with Furniture
2. Design Center and External References
 - A. Objectives:
 - a. Use the DesignCenter to drag and drop blocks into a drawing
 - b. Understand the advantages of External References and how to use them
 - c. Reinforce understanding of 3D walls, windows, doors, and components
 - B. Tutorial 10-1: 3D Reception Area Furniture Installation Plan Using the AutoCAD DesignCenter
3. Drawing the Reflected Ceiling Plan
 - A. Objectives:
 - a. Use AutoCAD to create a reflected ceiling plan
 - B. Tutorial 11-1: Part 1, Tenant Space Lighting Legend and Reflected Ceiling Plan
4. The Electronic Design Process
 - A. Objectives:
 - a. Understand the capabilities of different types of software
 - b. Understand strategies for efficiently managing different types of projects
 - c. Understand good file-management skills
 - d. Develop organizational tactics for starting a new project
 - B. Software families
 - C. The design process and project scope
 - D. Starting a new project
 - E. File storage and backup strategies
5. Simple Modeling
 - A. Objectives:
 - a. Understand the structure of SketchUp Models
 - b. Understand the basic workflow in SketchUp
 - c. Acquire basic modeling skills, including drawing and extruding different shapes
 - d. Understand inserting and creating components
 - e. Understand creating and saving views
 - B. Modeling the architecture
 - C. Adding color and components
 - D. Composing views and saving scenes of the model
 - E. Adding complex profiles
 - F. Drawing with inferences
 - G. Custom components
 - H. Slicing the model for plans and sections
 - I. Printing
6. Schematic Design for Small Projects
 - A. Objectives:

- f. Understand modeling strategy for more complex projects in SketchUp
 - g. Understand appropriate level of detail for a schematic model
 - h. Develop skills at creating, isolating, and controlling complex objects
- B. The Modeling Process for Complex Projects in SketchUp
 - C. Importing the Bubble Diagram
 - D. Organizing the Model with Layers
 - E. Drawing Complex Objects and Custom Objects
 - F. Annotating the Plan
 - G. Exporting to/Importing from AutoCAD

Student Learning Outcomes

By the end of this course, a student should be able to:

1. Review basic Computer Aided Design skills and commands.
2. Gain proficiency in more advanced areas of Computer Aided Design.
3. Learn more about settings. Units and switches.
4. Be familiar with the construct operation of Versacad.
5. Learn how to manipulate large drawings on the computer.
6. Be able to add dimensions to drawings.
7. Be able to create symbols and libraries.
8. Be able to include text and patterns in their drawings.
9. Become familiar with three-dimensional Computer Aided Design and create a 3-D drawing.