

ID A260: DESIGN COMMUNICATION 4: DIGITAL VISUALIZATION

Item	Value
Curriculum Committee Approval Date	04/04/2018
Top Code	130200 - Interior Design and Merchandising
Units	3 Total Units
Hours	90 Total Hours (Lecture Hours 36; Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

Course Description

Application of the methods, techniques, and tools used for illustrating interior spaces two and three-dimensionally through the use of technology/software programs. Students should have basic knowledge of computer operation, CAD and file management. ADVISORY: ID A130 and ID A170. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Develop and produce perspective drawings that efficiently convey Interior Design concepts, utilizing technology to illustrate common Interior Architectural characteristics and materials with an emphasis on rapid production.

Course Objectives

- 1. Develop efficient methods to visually convey design ideas.
- 2. Utilize 3D software programs to prepare quick sketch perspectives of interior spaces and products.
- 3. Produce digital perspective sketches with an emphasis placed on rapid production.
- 4. Develop rapid rendering techniques that can be used to enhance the quick sketch perspective.
- 5. Draw and render commonly used interior architectural characteristics and materials utilizing a variety of software programs.
- 6. Develop the ability to visualize in 3-D by experimenting with 3-D digital models.
- 7. Develop visual and oral presentation skills.

Lecture Content

Software Overview Terminology Drawing tools and materials File organization File Formats Two-Dimensional Renderings Rendering Techniques Colored Floor Plans Colored Elevations Building Digital 3D Models Setting up software Layers and Components Floors and Walls Windows Stairs Furniture and built-ins Materials, Textures and Patterns

Applying Styles to 3D models Wood Reflective Surfaces Masonry Gradients and Shading Shadows and Lighting Exploring 3D Sections Cutting Plans and Sections Making a Section Perspective Creating Section Animation Scenes Presentation Techniques Verbal and Written Communication Digital Animation Schemes Graphic Layout Exporting Images/Files

Lab Content

I. Observed and shared student interactions. Lab time is use to develop skills learned through course content with instructor oversight and open dialogue with peers.A. Work on projects as individuals and in small groupsB. Prepare and observe class presentations C. Utilize campus and classroom library books, technology and materialsD. develop peer interaction, build working relationships, and group collaboration skills. II. Application of Digital Rendering Techniques to enhanceA. AutoCAD drawingsB. Free-hand drawingsC. 3D digital models/perspective drawings III. Two-Dimensional RenderingsA. Colored Floor PlansB. Colored ElevationsIV. Building Digital 3D ModelsA. Application of Model ComponentsB. Exploring Modeling StylesC. Animation TechniquesV. Presentation TechniquesA. Digital Animation SchemesB. Graphic LayoutC. Exporting Images/Files

Method(s) of Instruction

- Lecture (02)
- DE Online Lecture (02X)
- Lab (04)
- DE Online Lab (04X)

Instructional Techniques

Lecture, demonstration, video, laboratory, critique (instructor/student), multi-media, research, and student presentation.

Reading Assignments

Assigned reading from texts/handouts 2 hours per week.

Out-of-class Assignments

Digitally render commonly used interior products, materials and surfaces. Organize them into a reference file that itemizes the tools and media(s) utilized to complete them. Render AutoCAD generated floor plan utilizing software programs that work in conjunction with AutoCAD. Produce a 3D model and three quick design solutions for the same space with alternate products, materials and surfaces. Produce a 2D plan utilizing software programs that will transition into 3D. Create a 3D model and render using industry-standard photo-realistic programs 3-4 hours per week.

Demonstration of Critical Thinking

Student projects, class presentations, research, examinations, and exercises that demonstrate student understanding of skills.

Required Writing, Problem Solving, Skills Demonstration

Student projects, class presentations, research, examinations, and exercises that demonstrate student understanding of skills.

Eligible Disciplines

Interior design: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Fane, B., Harrison, M., Reilly, J. SketchUp For Dummies, 2nd ed. Hoboken: Wiley, 2020

Software Resources

1. SketchUp Studio for Students. Creation Engine, 2024 ed. SketchUp Studio for Students 1-Year License Download Regular price\$55.00