



DRFT 2350

Division: Career and Technical Education

Department: Drafting Technology

Course: DRFT 2350

Title: 3D Studio VIZ

Catalog Description:

This program teaches the basics of 3D Studio VIZ program, which produces realistic renderings of still images and animation. This course combines a theoretical approach with accompanying hands-on activities to instruct students in the basic procedures for creating scenes, importing drawings, and using models to construct still images and animations with practical application in the areas of architecture, mechanical motion, and graphic arts.

General Education Requirements: N/A

Semesters Offered: TBA

Credit/Time Requirement: Credit: 4; Lecture: 2; Lab: 4

Clock/Hour Requirements: 90

Offered for Non-Credit: No

Prerequisites: DRFT 1310

Corequisites: None

Justification:

This course is approved by the program advisory committee and corresponds to UVSC course DT 2700.

Student Learning Outcomes:

Upon completion of this course, students will be able to:

- understand the fundamentals of 3D Studio VIZ and 3D presentations
- create rendered still images or an animation by assembling these rendered still images into a movie file
- create and modify objects by adding cameras and lights, choosing material types and creating rendered scenes
- move around the scene with different viewing angles
- create and edit animation objects using 3D Studio VIZ
- use different parametric shapes with special Boolean and AEC modeling to complete realistic 3D scenes
- create and place different materials on the surface of objects to enhance realism
- understand the concept of animation and setting up animated actions
- understand the process of linking animated objects with effects such as, shadow, fog, light, etc.

Content:

Course objectives will be achieved by providing students with instructional and hands-on experiences in the following areas:

- learning 3D Studio VIZ fundamentals in creating animation programs
- using rendering and animation applications
- interacting with 3D Studio VIZ to create movie files
- creating objects and scenes using lights and materials
- moving around a 3D Studio VIZ scene
- basics of object creation and editing
- basics of geometric modeling and advanced modeling with Boolean and AEC objects
- using special camera and lighting techniques
- creating and using realistic material types
- creating animated actions
- knowing how to use linking and inverse kinematics to produce special effects.

General Education Outcomes:

2) Write clearly, informatively, and persuasively.

Students are required to complete descriptive term-sheets which provide information about the vocabulary and terminology used in this specific area. The descriptions are reviewed, graded, and returned to students for improvement.

6) Apply computational skills to a variety of contexts.

The field of drafting requires the combination of basic math, geometry, and algebra skills. Students will utilize these skills when producing drawings, cost estimates, and material lists.

9) Respond with informed sensitivity to an artistic work or experience.

In both mechanical and architectural drafting, the final product must be presented to the client. At this point in the process, students must recognize quality artistic efforts in order to be able to produce their own final presentation drawings.

Key Performance Indicators:

In class:

- Students will demonstrate mastery of course competencies by completing assignments/projects, tests, and quizzes. Assignments/projects are worth 75%, tests are worth 15%, and quizzes are worth 10% of the final grade.

Following class:

- Students will be able to demonstrate animation skills in specified areas of employment by creating animated presentations.

Representative Text and/or Supplies:

- *3D Studio V12, Fundamentals*, current edition, Prentice Hall.

Signatures:

I hereby submit this course syllabus:

Craig Conder, ,

I hereby find this course consistent with the goals and resources of the Drafting Technology Department:

Craig Conder, , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)