



DRFT 2390

Division: Career and Technical Education

Department: Drafting Technology

Course: DRFT 2390

Title: Animation

Catalog Description:

This course introduces a three-dimensional modeling and animation program designed to create professional quality three-dimensional models, photorealistic still images, and film quality animation. Included is the use of lighting, different materials, and rendering to create realistic visual affects.

General Education Requirements: N/A

Semesters Offered: TBA

Credit/Time Requirement: Credit: 3; Lecture: 2; Lab: 2

Clock/Hour Requirements: 60

Offered for Non-Credit: No

Prerequisites: DRFT 1300

Corequisites: None

Justification:

This course is approved by the program advisory committee.

Student Learning Outcomes:

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

- understand the basic operations and the commands pertaining to animation
- create and modify objects in the animated environment
- know the basics of using a camera, lighting, assigning materials, and rendering animated scenes
- understand the principles of the coordinate system and how to apply the principle of stacking objects
- learn the basics of using a mesh and mesh modifier to create objects
- learn the basics of animation using a track view
- understand how to create materials, change colors and shading, and map the different materials to objects
- know the basic principles of applying lighting and special effects to animate objects
- understand some of the basics used in advanced modeling and the application in animation.

Content:

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

- getting acquainted with the basic principles of animation

- learning how to interface objects from other programs and create new objects using the animation process
- learning how to create an animated scene
- foundations in animation, including stacks, stack modifiers, meshed objects, and working with multiple objects
- animation and the track view
- basic principles of kinematics
- applying materials and mapping them to objects
- lighting and rendering objects
- advanced modeling and animation.

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.

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:

- The knowledge and skills acquired in this course will be demonstrated in subsequent courses and in successful application in subsequent employment.

Representative Text and/or Supplies:

- *3D Studio Max*, three volume set, current edition, Autodesk, Inc.

Optimum Class Size: 12

Maximum Class Size: 20

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)