Course Description

Provides the student with an advanced understanding of the principles of building three-dimensional objects, characters, and interior and exterior environments with current industry software. Lecture 2 hours. Studio instruction 2 hours. Total 4 hours per week.

General Course Purpose

Develop technical skills for the construction of three-dimensional models and their application with other modules such as animation in current industry 3D software programs.

Course Prerequisites/Co-requisites

Prerequisites are ART 130 Multimedia I and ART 131 Fundamentals of Design I.

Course Objectives

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

- Build three-dimensional objects and environments
- Explore the relationship between an object and its environment
- Understand three-dimensional models and their use in multimedia design and animation
- Apply forward and inverse kinematics
- Work with particles and dynamics
- Set keyframes and motion paths
- Understand and the vocabulary associated with three-dimensional modeling, animation and rendering

Major Topics to be Included

- Strategies for building and modeling three-dimensional forms
- 3D modeling tools
- Lighting techniques and mapping
- Texture and color mapping
- Rendering techniques
- Model with polygons
- Familiarity with current software, hardware and operating systems