Minnesota State University Moorhead

ANIM 216: 3D Modeling

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

This course requires the following prerequisite ANIM 116 - Foundations in Animation

Corequisites: None

MnTC Goals: None

3D Modeling is a course in which students gain hands-on experience building three-dimensional models through the use of computer-generated images. A variety of disciplines and applications of 3D modeling are surveyed, including how modeling is used by forensic animators, engineers, architects, and game developers. Iterative concept development and previsualization are used in the creation of 3D models and 3D environments.

B. COURSE EFFECTIVE DATES: 02/02/2019 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

- 1. 3D Modeling
- 2. 3D Environmental Models
- 3. Survey of applications and disciplines using 3D modeling
- 4. Pre-visualization
- 5. 3D modeling workflows
- 6. 3D software file management and interface
- 7. Objects, viewpoints and light
- 8. Polygons and Textures
- 9. Rendering, output, and presentation

D. LEARNING OUTCOMES (General)

- 1. Use previsualization tools and engage in iterative concept development.
- 2. Create 3D models of varying degrees of difficulty using 3D modeling software.
- 3. Create basic 3D environments.
- 4. Understand, create, and manipulate polygons.
- 5. Have a basic understanding of textures and lighting in relation to 3D models and environments.
- 6. Demonstrate an understanding of the complexity of computer-based 3D animation.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted