COURSE OUTLINE

Art 238
Advanced Texturing for 3-D Animation

Catalog Statement

ART 238 provides instruction in advanced texturing of 3-D objects for integration into a 3-D game environment or photo-real cinematic sequence. This class is entirely project-based. The instructor leads the students through the texturing process for a 3-D character and a complex inorganic object. The process of unwrapping UV's and painting textures in Photoshop is covered with the focus on developing real world production skills.

Total Lecture Units: 2.5
Total Laboratory Units: .5
Total Course Units: 3.0

Total Lecture Hours: 40.0
Total Laboratory Hours: 24.0
Total Laboratory Hours To Be Arranged: 0.0
Total Faculty Contact Hours: 64.0

Prerequisite: ART 237 or equivalent

Note: Current industry standard digital animation software will be used.

Course Entry Expectations

Prior to enrolling in the course, the student should be able to:

- navigate the rendering module of Maya;
- describe the difference between procedural and bitmap textures;
- use procedural textures to create textures on nurbs objects;
- unwrap UV's of an inorganic polygon model and create a UV snapshot;
- unwrap UV's of an organic polygon model and create a UV snapshot;
- evaluate the topology of a given model with respect to texturing;
- correct UV parameterization;
- create, assign, and manage a bitmap texture file.

Course Exit Standards

Upon successful completion of the required coursework, the student will be able to:

- texture a 3-D character in Maya;
- texture a complex inorganic object in Maya;
- unwrap and layout UV's;
- work seamlessly between Photoshop and Maya.

Course Content **Total Faculty Contact Hours = 64.0**

Texturing an Inorganic Object **(20 hours)**
- UV projections
- UV unwrapping and sewing
- UV snapshot creation
- Photoshop and Maya texture creation

Texturing an Organic Object **(20 hours)**
- UV projections
- UV unwrapping and sewing
- UV snapshot creation
- Photoshop and Maya texture creation

Laboratories Emphasizing Technical and Aesthetic Development **(24 hours)**

Methods of Instruction

The following methods of instruction may be used in this course:
- lectures and demonstrations;
- instructor critique of student work;
- peer critique of student work;
- individual instruction of students in a computer lab.

Out of Class Assignments

The following out of class assignments may be used in this course:
- projects (e.g. acquire data for texture creation and compose texture out of source imagery).

Methods of Evaluation

The following methods of evaluation may be used in this course:
- peer and instructor review;
- review of final projects;
- final examination.

Textbooks

"Autodesk Maya." *Autodesk Knowledge Network*. Autodesk Inc., n.d. Web. 8 May 2014.
9th Grade Reading Level

"Maya Learning Channel." *YouTube*. YouTube, n.d. Web. 8 May 2014.
9th Grade Reading Level

Student Learning Outcomes

Upon successful completion of the required coursework, the student will be able to:
- texture a complex inorganic model.