

## **COURSE OUTLINE**

### **Art 238 Advanced Texturing for 3-D Animation**

#### **I. 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.

Units – 3.0

Lecture Hours – 2.0

Total Studio Hours – 4.0

(Faculty Studio Hours 2.0 + Student Studio Hours 2.0 = Total Studio Hours 4.0)

Prerequisite: Art 237 or equivalent.

\*Note: Current industry standard digital animation software (Maya) will be used.

#### **II. Course Entry Expectations**

Skills Level Ranges: Reading 5; Writing 5; Listening-Speaking 5; Math 3

Prior to enrolling in this course, the student will be able to:

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

#### **III. Course Exit Standards**

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

1. texture a 3-D character in Maya;

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

#### **IV. Course Content**

A. Texturing an Inorganic Object	16 hours
1. UV projections	
2. UV unwrapping and sewing	
3. UV snapshot creation	
4. Photoshop and Maya texture creation	
B. Texturing an Organic Object	16 hours
1. UV projections	
2. UV unwrapping and sewing	
3. UV snapshot creation	
4. Photoshop and Maya texture creation	
C. Laboratories Emphasizing Technical and Aesthetic Development	32 hours

#### **V. Methods of Presentation**

The following instructional methodologies may be used in the course:

1. lectures and demonstrations;
2. instructor critique of student work;
3. peer critique of student work;
4. individual instruction of students in a computer lab.

#### **VI. Assignments and Methods of Evaluation**

1. Projects.
2. Peer and instructor review.
3. Review of final projects.
4. Final examination.

#### **VII. Textbook**

Alias-Wavefront Company. Learning Maya: Rendering.  
Toronto: Sybex Press, 2007.  
12<sup>th</sup> Grade Textbook Reading Level. ISBN 1894893719.