

Course Description

DIG2790 | Texturing & Environment Design | 4.00 credits

This course is for students majoring in Animation & Game Art. Students will learn advanced 3D animation job skills used in creating 3D feature animation and game development, including advanced texturing, lighting and rendering a final image. Prerequisite: DIG1302 (4 hr. lecture)

Course Competencies

Competency 1: The student will demonstrate the ability to apply lighting theory by:

1. Applying the principles of color mixing in lighting
2. Emulating real-world lighting conditions
3. Developing lighting design

Learning Outcomes:

- Solve problems using critical and creative thinking and scientific reasoning
- Use computer and emerging technologies effectively
- Demonstrate an appreciation for aesthetics and creative activities

Competency 2: The student will demonstrate the ability to utilize lighting in a 3D package by:

1. Differentiating between physical and simulated lighting properties
2. Implementing direct and indirect lighting
3. Utilizing light to define shapes and form
4. Demonstrating an understanding of how light interacts with surface
5. Applying principles of lighting to a 3D scene to reflect an appropriate mood and setting

Competency 3: The student will demonstrate the ability to understand and create textures by:

1. Creating 2D and 3D textures
2. Creating environment textures
3. Creating layered textures
4. Utilizing Adobe Photoshop Texture Networks

Competency 4: The student will demonstrate the ability to analyze and evaluate texture mapping techniques by:

1. Applying UV mapping techniques

Competency 5: The student will demonstrate the ability to create comprehensive shading networks by:

1. Identifying the components of a shading network
2. Creating comprehensive shading networks
3. Rendering in 3D applications using materials and textures