**Course Description:**
This is a capstone course for students majoring in Animation and Game Art. Building on skills learned in Animation Studio 1, students will learn enhanced skills in the areas of 3D modeling, texturing, lighting, and animation. Working in groups, students develop a project plan and produce a short, 3D animated movie. Prerequisite: DIG 2318 or CAP 2048. (3 hr. lecture)

**Course Competency**

**Course Competency 1:** The student will demonstrate knowledge of 3D animatics, layout and camera direction by:
1. Building a 3D animatic.
2. Setting up the stage.
3. Creating object and character movement.
4. Manipulating camera direction.
5. Editing the animatic.

**Learning Outcomes:**
- Communication
- Critical thinking
- Computer / Technology Usage
- Aesthetic / Creative Activities

**Course Competency 2:** The student will demonstrate knowledge of modeling and production workflow by:
1. Compiling reference material.
2. Creating drawings and sculptures.
3. Choosing modeling techniques.

**Course Competency 3:** The student will demonstrate knowledge of materials and textures by:
1. Assigning materials to geometry
2. Choosing material types.
3. Creating original textures.

**Course Competency 4:** The student will demonstrate knowledge of character setup by:
1. Rigging the character.
2. Binding the character.
3. Creating facial systems for the character.
4. Setting up secondary characters and secondary objects.

**Course Competency 5:** The student will apply knowledge of animation by:
1. Defining and choosing animation styles.
2. Blocking the scenes to be animated.
3. Creating dope sheets for the project.
4. Animating a character.
5. Applying forward kinematics and inverse kinematics.
6. Animating facial expressions.

**Course Competency 6**: The student will demonstrate knowledge of lighting and rendering by:
1. Choosing appropriate lighting attributes for the scene.
2. Choosing natural versus artificial lighting.
3. Applying shadows to characters and objects.
4. Choosing from available lighting techniques.
5. Rendering the scenes.
6. Creating a lighting and rendering production workflow.