Course Information Form (CIF)

Course Code: CSC 189

Course Title: 3D Computer Animation III

Department: Business/Computer Science and Technologies
Effective Date: Summer 2026
PCS Code: 1.1 - Baccalaureate/Transfer
CIP Code: 10.0304
Repeatability: 0

Credit Hours

Catalog Notation: 3-2-4
Credit Hour Distribution:

Lecture: 3	Lab: 2	Clinical: 0	**Total: 4**

General Course Information

Catalog Description

Intermediate topics in 3D character design, development, and animation for 3D applications including gaming, film, visual effects, virtual and augmented reality, and related disciplines.

General Course Objectives

- Equip students with the fundamental knowledge and skills in developing 3D characters in a 3D digital environment for digital media areas including gaming, film, and interactive applications.
- Become proficient with techniques in standard professional character 3D animation software packages.
- Apply cinematic design considerations in 3D character development.

Minimum Placement Levels

English	Reading	Math
None	None	None

Prerequisites

Credit in CSC 187

Methods of Evaluation

8-10 small-scale studies will be given to introduce and develop the student's understanding and proficiency of course concepts and skills. 5-6 large-scale projects will be regularly assigned to apply the concepts introduced in the studies. Project assignments form the basis of the student's portfolio work in 3D computer animation.

Instructional Materials and Additional Supplies

Taught in lab environment with specialized software and hardware. Regular upgrades of software and hardware expected annually.
Students are required to have a USB flash drive.

Course Content

General Learning Outcomes (GLOs)

- Creativity and Innovative Thinking: Students will design, present, and interpret materials, information, and ideas in innovative ways.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Course Introduction	1. Identify course requirements, goals, expectations, and examples of course portfolio work.	1	1	0
Sculpting Fundamentals	1. Describe fundamental techniques of using 3D digital sculpting software. 2. Apply fundamental techniques of using 3D digital sculpting software.	4	2	0
Form Sculpting	1. Describe techniques for sculpting overall character form and silhouette. 2. Apply techniques for sculpting overall character form and silhouette.	4	3	0
Muscle Sculpting	1. Describe techniques for sculpting underlying character muscle form. 2. Apply techniques for sculpting underlying character muscle form.	4	3	0
Clothing Sculpting	1. Describe techniques for sculpting character base clothing form. 2. Apply techniques for sculpting character base clothing form.	4	3	0
Clothing Detailing	1. Describe techniques for sculpting character clothing detail. 2. Apply techniques for sculpting character clothing detail.	4	3	0
Clothing Texturing	1. Describe techniques for sculpting character clothing texture. 2. Apply techniques for sculpting character clothing texture.	4	3	0
Character Accessories - Pose Tools	1. Describe techniques for using pose tools to create character accessories. 2. Apply techniques for using pose tools to create character accessories.	4	3	0
Character Accessories - Base Mesh Modeling, Scanned Models	1. Describe techniques for using base mesh modeling and scanned models to create character accessories. 2. Apply techniques for using base mesh modeling and scanned models to create character accessories.	4	2	0
Re-topologizing - Levels	1. Describe techniques for re-topologizing high resolution character using sculpting levels. 2. Apply techniques for re-topologizing high resolution character using sculpting levels.	4	2	0
Re-topologizing - Quad Drawing	1. Describe techniques for re-topologizing high resolution character using quad drawing. 2. Apply techniques for re-topologizing high resolution character using quad drawing.	4	3	0
Rigging	1. Describe techniques for assembling and preparing character for rigging. 2. Apply techniques for assembling and preparing character for rigging.	4	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	30	0