

University of Arkansas - Fort Smith
5210 Grand Avenue
P. O. Box 3649
Fort Smith, AR 72913-3649
479-788-7000

General Syllabus

BSAT 3004 - Animation Overview

Credit Hours: 4

Lecture Hours: 2

Lab Hours: 4

Effective Catalog: 2018-2019

I. Course Information

A. Catalog Description

Provides an orientation for animation techniques and 3D modeling practices for transfer and non-Digital Design CGT students. Beneficial for disciplines such as architects, engineers, and designers interested in animation and who have basic CAD knowledge.

B. Additional Information

This course is designed for all disciplines – architects, engineers, designers, or anyone who needs a thorough foundational understanding of animation techniques and 3D modeling practices. The course will begin with basic visualization/modeling principles, materials, lights, and auto-key animation through some advanced modeling techniques, controllers, and key-framing practices. Students will also be working with model topology through texturing, and UVW maps in regards to objects, scenes, lights, and animation. Students will utilize these practices and visualization techniques to gain a firm foundation in 3D animation skills.

II. Student Learning Outcomes

A. Subject Matter

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

1. Create simple models.
2. Create complex models.
3. Create and control animated motion.
4. Create and modify key-frames.
5. Describe animation techniques.
6. Construct, color, and texture objects.
7. Create and modify custom materials.
8. Create accurate lighting scenarios.

9. Understand conceptual development techniques.
10. Output rendered scenes to image sequences and convert them to video

B. University Learning Outcomes

This course enhances student abilities in the following areas:

Communication Skills (Written and Oral)

Students will prepare a professional resume and present in an e-portfolio. The students will start their collection of works for their e-portfolio final capstone projects.

III. Major Course Topics

A. Professional Knowledge

1. Setting and managing project files.
2. Understand basics of Animation.
3. Understand basic/moderate modeling practices.
4. Learn to color and texture objects.
5. Create environmental models.
6. Create motion and learn to key frame.
7. Understand basics of textures and UVW maps
8. Understand lighting concepts.
9. Output scenes to image sequences and convert them to video.

B. Visualization Skills

1. Recreating objects and environments by utilizing visualization practices.
2. Conceptualization and rendering skills.
3. Describe various types of animations.
4. Generate rendered images for a variety of media formats.