University of Arkansas – Fort Smith

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

General Syllabus

CGT 2664 Digital Design Level I

Credit Hours: 4 Lecture Hours: 2 Prerequisite: CGT 1644 3D Visualization Effective Semester: Summer I 2013 Lab Hours: 4

I. Course Information:

A. Catalog Description

Introduction to industry leading software programs designed and specifically structured around the goals of creative development and design visualization.

B. Additional Course Information

Topics to be covered in this course include making good quality scans and prints. In class exercises give students the opportunity for personal and creative development. Students will learn how Adobe Photoshop and Autodesk products interact with each other and also how to prep image for the Web.

II. Student Learning Outcomes

A. Subject Matter

Upon successful completion of this course, the student will be able to generate complex digital productions incorporating the following disciplines:

- 1. Model using primitives.
- 2. Model using modifiers.
- 3. Create animation using keyframing.
- 4. Create animation using track view and trajectories.
- 5. Create and edit materials using the Materials Editor.
- 6. Construct lighting with shadow and raytrace maps.
- 7. Construct special effects using volumetric light.
- 8. Develop animation using combustion, lens effects, and particle systems.

B. University Learning Outcomes

Communication Skills

Students will develop storyboards leading to full animations. Students will apply specialized information when they paraphrase or summarize information in the completed animations.

Technological Skills

Students will use software applications to transfer technical principles, ideas, and theories to new situations. Students will create examples, apply principles, and/or demonstrate an ability or skill of animation using available software.

Quantitative Reasoning

Students will arrange and combine information into new patterns. Students will generate a plan to formulate or modify a hypothesis or solution to a problem.

III. Major Course Topics

A. Professional Knowledge

- 1. Modeling using primitives and modifiers.
- 2. Animation, including key-framing, track view, trajectories, and changing controllers.
- 3. Creating and editing materials using the Materials Editor.
- 4. Lighting including shadow and raytrace maps.

B. Visualization Skills

- 1. Participate in small group projects based on animation skill levels.
- 2. Describe various types of animations.
- 3. Generate rendered images for a variety of media formats.