# University of Arkansas - Fort Smith

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# **General Syllabus**

### **CGT 1644 - 3D Visualization**

Credit Hours: 4 Lecture Hours: 2 Lab Hours: 4

Effective Semester: Summer I 2014

#### I. Course Information:

## A. Catalog Description

An introduction to the releases of 3D software. Students research a 3D topic and prepare a written and oral report on the latest 3D applications. Current market trends and availability reviewed.

#### **B.** Additional Information

This course provides the student with research projects relating to the latest animation software. This course is ideal for students who have an interest in animation, virtual reality and interactive game design. All real world applications will be discussed during this course.

## **II. Student Learning Outcomes**

## A. Subject Matter

- a. Introduction to Revit
  - 1. User Interface
  - 2. Workflow
  - 3. Creating objects
  - 4. File formats
- b. Introduction to Inventor
  - 1. User Interface
  - 2. Workflow
  - 3. Creating objects
  - 4. File formats
- c. Introduction to 3ds Max
  - 1. User Interface
  - 2. Workflow
  - 3. Creating objects
  - 4. File formats

# **B.** University Learning Outcomes

### **Communication Skills**

Students will develop skills in communication by using power point to present their projects developed in the course. Students will be prepared to present their drawings or other work products to their classmates and instructor.

### **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 in the creation of working drawings, specifications and other industry specific applications using the software available for the specific project.

## **III. Major Course Topics**

# A. Professional Knowledge

- 1. Gain a wide introductory level of hands-on experience with numerous industry standard 3D computer programs
- 2. Acquire the vocabulary required to work in 3D computer programs.

#### **B.** Visualization Skills

1. Visualize three dimensional elements in two-dimensional space.