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

General Syllabus

CGT 2303 Integrated 3D Applications

Credit Hours: 3   Lecture Hours: 2   Laboratory Hours: 2

Prerequisite: CGT 1644 3D Visualization.

Effective Catalog: 2020-2021

I.   Course Information
   A. Catalog Description
   Introduces students to 3D programs and connectivity, including how to choose
   programs for the appropriate application. Students will research and utilize programs
   to develop scenes and animations.

   B.   Additional Information
   This course provides the student with animation projects relating to the latest
   professionally-used software. This course is ideal for students who have an interest in
   animation, virtual reality, environments, CG modeling, and interactive game design.
   Real world applications, process, and pipelines will be discussed during this course.

II.   Student Learning Outcomes
   A. Subject Matter
   Upon successful completion of this course, the student will be able to:

   1. Create a wide range of hands-on projects with industry standard 3D programs.
   2. Discuss the vocabulary required to work in 3D programs.
   3. Define interactions between various software

   B. University Learning Outcomes
   This course enhances student abilities in the following areas:

   Analytical Skills
   Critical Thinking Skills

Students will identify problems with 3D scenes during creation and develop solutions to solve issues. In addition, students will identify errors in scene development, develop solutions to a fixed scene and research the development of future programs.

Communication Skills (oral and written)
Students will compose coherent documents appropriate to the intended audience and portray their work using renders and files according to assignment requirements.

Ethical Decision Making
Students will identify ethical dilemmas within the context of project work.

III. **Major Course Topics**

A. Introduction to 3D Modeling
    a. User interface
    b. Workflow
    c. Modeling
    d. Animation
    e. Texturing
B. Introduction to Organic Modeling
    a. User interface
    b. Workflow
    c. Editing objects
C. Introduction to Photo Editing
    a. User interface
    b. Workflow
    c. Creating materials
D. Introduction to Game Design
    a. User interface
    b. Workflow
    c. Importing and working with games