### **Syllabus**

#### **ARCH 229**

### 3DS MAX FOR ARCHITECTURE AND ENGINEERING

### I. Course Description

Architecture 229 teaches the fundamentals of 3DS MAX and its use in the Architecture and Engineering industry. Topics include residential and commercial building walkthroughs, rendering, and lighting, adding textures and creating presentation files for residential and commercial architecture and engineering development. Current industry standard digital animation software will be used.

This class meets every other week as a traditional on-campus class for 6 hours and 25 minutes and as an online class every other week for 6 hours. This class is enhanced with online components.

Units -3.0Lecture Hours -2.0Total Studio Hours -4.0(Faculty Studio Hours -2.0 + Student Studio Hours -2.0 = 2.0 Total Studio Hours)

### II. Prerequisites

Prerequisite: ENGR 109 or ARCH 250, or equivalent.

# III. Exit Standards/Student Learning Outcomes

Upon successful completion of the required coursework, the student will be able to:

- 1. import cad data from other programs such as AutoCad
- 2. organize imported data, prepare for texturing
- 3. understand the concepts of texture, lighting and camera placement
- 4. animate camera to create environmental "walkthrough"
- 5. utilize the concepts of post production and the creation of presentation file using the 3DS Max software

### IV. Attendance/Absence/Tardiness Policy

Attendance and punctuality is critical to your success with this class. Each lesson presents key concepts upon which subsequent lessons are built. Unexcused absence from 2 classes can constitute a reduction of letter grades.

Lecturing will begin promptly 15 minutes after beginning of class.

## V. Grading Method

A final project is due at the end of the last class, which is intended to demonstrate an understanding of these concepts:

- 1. 3D navigation
- 2. Basic modeling with primitives
- 3. Texturing
- 4. Lighting
- 5. Camera placement and animation
- 6. Rendering

The final grade totals 400 points. Final Grade is an evaluation of the above concepts, as well as attendance, punctuality and in-class performance. Letter grade equivalents are:

A = 400 - 360

B = 359 - 320

C = 319 - 280

D = 279 - 240

F = 239 - 0

# VI. Exam Makeup Policy

No exam or quiz will be made up, unless the absence is pre-approved or due to an emergency.

## VII. Academic Honesty Policy

Glendale College adheres to an Academic Honesty policy, which can be found in the Student Handbook's section on Academic Honesty.

### VIII. Students With Disabilities

All students with disabilities requiring accommodations are responsible for making arrangements in a timely manner through the Center for Students with Disabilities.

# IX. Course Materials

Required: 1GB USB flash drive (can be found in GCC bookstore)

### X. Class Requirements and Instructor Expectations

There is no homework assigned for this course—attendance and punctuality is critical to success.

The goal is to learn 3DS Max. The best way to learn 3D is in a collaborative environment. Exercises will be open book, and students are expected to help each other.

## **XI.** Office Hours and Telephone Number

My office is AT223. Office hours are Saturdays from 8:25-9:00 a.m. and 11:45 a.m.-12:30 p.m. Additional office hours are available by appointment. You may contact me via E-mail at: **tpapiens@glendale.edu**.

## XII. Schedule of Assignments and Course Outline

3DS Max will be taught through the completion of several in-class exercises, each conveying basic concepts, such as lighting, texturing, modeling, etc. Additionally, all of the concepts outlined below will be combined in a Final Project, due at the completion of the course. There is no homework, but non-credit lab time is encouraged (location TBD).

A. User Interface	8 Hours
1. Menus & toolbars	
2. Viewports	
3. Viewport navigation	
4. Application settings	
B. Modeling	8 Hours
1. Work environment setup	
2. Basic modeling tools	
3. Modifier tools	
C. Materials and Mapping	8 Hours
1. Materials creation and management	
2. Using bitmaps and other mapping types	
D. Lighting and Illumination	8 Hours
1. Basic lighting types and parameters	
2. Lighting placement	
3. Global illumination	
E. Camera Tools	8 Hours
1. Basic camera types and parameters	
2. Camera placement and animation	
3. Lenses	
F. Rendering	4 Hours
1. Render Scene dialog box	
2. Render tab overview	
3. File output types	
G. Workflow, Post Production and Additional Tools	4 Hours
1. Scene files management	
2. Output file management	
3. Miscellaneous software used with 3DS Max	