

APTECH 53 Course Outline as of Fall 1998**CATALOG INFORMATION**

Dept and Nbr: APTECH 53 Title: COMPUTER ANIMATION

Full Title: Computer Modeling & Animation with 3D Studio Max

Last Reviewed: 1/25/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	14	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	2.00		Non-contact DHR	35.00

Total Out of Class Hours: 70.00

Total Student Learning Hours: 192.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 39 - Total 2 Times

Also Listed As:

Formerly:

Catalog Description:

Three-Dimensional modeling, rendering, and animation using the windows-based 3D Studio Max Software program. The student will create professional quality 3D models, photo-realistic still images and film quality animation at the personal computer. Topics include: creating 3-Dimensional objects and scenes, assigning and editing bitmap materials, creating and setting light sources and camera, casting shadows, and describing movement of: objects, camera, and lights to produce desired results at computer animations.

Prerequisites/Corequisites:**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Three-Dimensional Modeling, Rendering, and Animation using the Windows-Based 3D Studio Max Software Program. The student will create professional quality 3D models, photo-realistic still images and film quality animation at the personal computer. (Grade

Only)
 Prerequisites/Corequisites:
 Recommended:
 Limits on Enrollment:
 Transfer Credit: CSU;UC.
 Repeatability: Total 2 Times

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 1998	Inactive:
UC Transfer:	Transferable	Effective: Fall 2013	Inactive:

CID:

Certificate/Major Applicable:
 Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

At the conclusion of this course the student will be able to:

1. View pre-existing 3D Models and Scenes in 3D Studio Max.
2. Create and edit 3D Models and Scenes in 3D Studio Max.
3. Assign bitmap materials to 3D objects using the material editor and mapping coordinates.
4. Set and adjust lighting and shadows.
5. Set and adjust cameras.
6. Establish and control environmental factors at 3 Dimensional scenes.
7. Create renderings of 3 Dimensional scenes.
8. Describe movement of: objects, lights, and camera at animations.
9. Produce broadcast quality animations.

Topics and Scope:

1. Overview of 3D Studio Max's features and interface.
2. Overview of the Cartesian Coordinate System and viewing of 3 Dimensional objects within 3D Studio Max's Interface.
3. Creation and editing of 3 Dimensional Objects and Scenes.
4. Assigning and editing bitmap materials.
5. Mapping coordinates.
6. Setting and adjusting light sources and shadows.
7. Establishing environmental factors at 3 Dimensional scenes.
8. Creating photo-realistic still images.

9. Creating broadcast quality animations.
 - A. Object movement and deformation.
 - B. Keying cameras.
 - C. Keying lights.
 - D. Looping animations.

Assignment:

Homework: Weekly Computer Assignments (done in Lab).

Exams: Midterm and Final

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing
0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems

Problem solving
30 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams

Skill Demonstrations
30 - 50%

Exams: All forms of formal testing, other than skill performance exams.

Completion

Exams
10 - 20%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

AutoDesk, 3D Studio Max User's Guide, Volumes 1 and 2, AutoDesk Inc., June 1996. Publication #12801-000000-5021 and #12801-000000-5031.

AutoDesk, 3D Studio Max Tutorials, AutoDesk Inc., March 1996, Publication #12801-000000-5041.

