

CATALOG INFORMATION

Dept and Nbr: APTECH 84 Title: ANIMATION FOR DRAFT
Full Title: Computer Animation for Drafting/Design
Last Reviewed: 10/18/2010

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	17.5	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:
Computer animation utilizing AutoDesk's 3D Studio Software. Topics covered will include: creating 3 Dimensional 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. The student will produce broadcast quality animations of architectural walkthroughs, flyarounds and other 3 Dimensional scenes.

Prerequisites/Corequisites:
Course Completion of APTECH 57

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Computer animation utilizing AutoDesk's 3D Studio Software. The student will create 3 Dimensional scenes and produce broadcast quality computer animations. Projects include architectural walkthroughs and flyarounds. (Grade Only)
Prerequisites/Corequisites: Course Completion of APTECH 57

Recommended:
Limits on Enrollment:
Transfer Credit: CSU;
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 1997	Inactive:	Fall 2017
UC Transfer:		Effective:		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. Construct 3 Dimensional objects utilizing 3D Studio's, 2D Shaper, 3D Loftter, and 3D Editor.
2. Import models from AutoDesk's AutoCAD Drafting/Design Software Program.
3. Assign bitmap materials to 3 Dimensional objects utilizing 3D Studio's Materials Editor and Mapping Coordinates.
4. Set and adjust lighting and shadows.
5. Render 3 Dimensional Scenes.
6. Describe movement of: objects, lights, and camera at animations.
7. Produce broadcast quality animations.

Topics and Scope:

1. Review of AutoCAD's 3D Viewing, Construction, and Editing Commands.
2. Overview of the 3D Studio Software Program to include: 3D Modeling, Material Assignment, Lighting, Camera, Rendering, and Keyframing.
3. Creating 3D Objects in 3D Studio.
 - a. 2D Shaper
 - b. 3D Loftter
 - c. 3D Editor
4. Importing AutoCAD files for utilization in 3D Studio.
5. Assigning bitmap materials.
6. Editing bitmap materials.
7. Mapping coordinates.
8. Setting and adjusting light sources and shadows.
9. Creating animations utilizing 3D Studio's Keyframer

- a. Object movement
 - b. Keying cameras
 - c. Keying lights
 - d. Looping animations
10. Maneuvering links, morphing and special effects.
11. Video post overview.

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 Reference Manual, AutoDesk Inc. September 1994.

Publication # 01505-010200-5030

AutoDesk, 3D Studio Tutorials, AutoDesk Inc. September 1994.

Publication # 01505-010200-5040

