

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: DT 181 Intermediate 3D Modeling/Animation with 3D Studio Max

UNIT VALUE: 3

MINIMUM NUMBER OF SEMESTER HOURS: 96

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills

ENTRANCE REQUIREMENTS

PREREQUISITE: DT 180

COREQUISITE: None

RECOMMENDED PREPARATION: None

SCOPE OF COURSE:

An in-depth study of 3D Studio Max, its underlying concepts, and its interface. Hands-on operation of the software to produce advanced three-dimensional models with advanced material applications.

SPECIFIC COURSE OBJECTIVES:

Successful students will:

1. Analyze and solve advanced problems relating to three-dimensional space using the 3D Studio Max software.
2. Use 3D Studio Max to model advanced three-dimensional models.
3. Use 3D Studio Max to build custom materials for various applications in the three-dimensional scene.
4. Visualize, analyze, and solve advanced three-dimensional problems using 3D Studio Max.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Intermediate 3D Studio Max Techniques
 - A. Specific creation methods for geometric models, morphs, particle systems, Booleans, and space warps.

- B. Creation, use, and adjustments of lighting to illuminate scenes.
- C. Creation, use, and adjustments of cameras to view and animate scenes.

II. Surfaces

- A. Adjusting normals and smoothing groups.
- B. Overview of materials, both basic and mapped, and their use in creating realistic surfaces.

III. Animation

- A. Intermediate animation concepts and methods.
- B. Building and animating hierarchies using forward and inverse kinematics.

IV. Rendering

- A. Concepts of creating final output with the scanline render directly from a scene.
- B. Details of creating final output with the scanline render after compositing with other materials.

REQUIRED READING:

Elliot, Steve. Inside 3D Studio Max. Gresham, OR: New Riders Publishing, 1996

SUGGESTED READING:

3D Studio Max Tutorials. (software documentation)

REQUIRED WRITING:

1. Demonstration of skills in preparing 3D Studio Max projects, materials, and animations is more appropriate.
2. A technical journal, of at least four pages, by student for all assigned projects to provide a written procedure for correctly producing the assignment.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Assigned readings and class handouts in preparation for examinations and class projects.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- _____ Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- _____ Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- _____ Two-Way Video Conferencing (Two-way interactive video and audio)
- _____ One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- _____ Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

- 60% Assignments are submitted and evaluated based on previously provided information and criteria. Assignments include three-dimensional modeling made with 3D Studio Max software.
- 20% Journal of techniques for assigned projects.
- 10% One examination at approximately the eighth week of course to test for general knowledge of material studied in the interim.
- 10% A comprehensive final examination.

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes X No _____ Number of times course may be taken for credit: 2

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

58161 (c) (2) (A)

CONTACT PERSON:

Dennis Lutz ext. 2560

SIGNATURES ON FILE