**Course Title:** Advanced 3D Computer Modeling

**Department:** Art/Media

**Curriculum:** Fine Arts

**Course Code:** GRA*277

**Course Type:** Z

**Prerequisites:** C- or better in 3-D Computer Modeling (GRA*275)

**Elective Type:** FA/G/LAS

**Credit Hours:** 3

**Contact Hours:**
- Lecture: 2
- Clinical: 0
- Lab: 0
- Studio: 2
- Other: 0
- TOTAL: 4

**Class Maximum:** 20

**Semesters Offered:** F/S

**Ability-Based Education (ABE) Statement:** At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students’ success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

**Catalog Course Description:** An advanced 3-D modeling course that builds upon skills learned in 3-D Computer Modeling. This course reaches deeper into the 3-D environment with more focus on detailed structures, textures, lighting and the beginning of animation. Students will learn how to control and render complex three dimensional files and create entire scenes for mini-productions. Animation techniques, processes and hardware requirements are introduced to the potential animator.

**Topical Outline:**
- 3-D texts and Manuals, web sites, user groups for 3-D animation.

**Outcomes:**

**Upon successful completion of this course,** the student will be able to do the following:

**COURSE:**
- 1. demonstrate control of 3-D software
2. demonstrate an understanding of Computer 3-D concepts
3. demonstrate basic animation skills
4. demonstrate control of output and rendering
5. exhibit refined 3-D computer skills
6. control of the 3-D computer environment
7. exhibit understanding of complex rendering techniques
8. show understanding of basic animation techniques

PROGRAM: *(Numbering reflects Program Outcomes as they appear in the college catalog)*

**Visual Fine Arts Associate Degree:**

1. demonstrate the concepts associated with formal artistic composition in two-dimensional image creation
2. demonstrate skills in handling materials in drawing, painting, and design
3. exhibit the importance of craft and professionalism in creating visual works of art
4. demonstrate the ability to work out visual problems as they occur in specific projects to achieve competent design resolutions
5. exhibit a sense of color systems, tonal relationships, and value relationships
6. demonstrate creative solutions to aesthetic problems via a professional portfolio presentation
7. exhibit a sense of aesthetics and sensitivity toward diverse areas of visual art
8. exhibit a sense of color systems, tonal relationships, and value relationships
9. demonstrate creative solutions to aesthetic problems via a professional portfolio presentation
10. exhibit a sense of aesthetics and sensitivity toward diverse areas of visual art
11. demonstrate the ability to communicate artistic ideas and concepts clearly and effectively
12. use critical thinking and philosophical skills as they apply to the artistic process

**GENERAL EDUCATION:** *(Numbering reflects General Education Outcomes as they appear in the college catalog)*

1. Aesthetic Dimensions - Students will understand the diverse nature, meanings, and functions of creative endeavors through the study and practice of literature, music, the theatrical and visual arts, and related forms of expression.
   - **Demonstrates:** Identifies and describes formal aspects, historical or cultural context, and aesthetic elements of the genre with clarity and appropriate vocabulary.
   - **Does Not Demonstrate:** Unable to clearly identify and describe the formal aspects, historical context, and aesthetic elements of the genre.

**Evaluation:**

Assessment will be based on the following criteria:

1. the instructor’s assessment of the student’s creative efforts
2. knowledge of 3-D computer software, technical skill
3. quality of performance and presentation as determined through: projects, discussion (group and individual) and a final digital portfolio of completed work

**Instructional Resources:**

List library (e.g., books, journals, on-line resources), technological (e.g., Smartboard, software), and other resources (e.g., equipment, supplies, facilities) required and desired to teach this course.

**Required:** Course taught in Graphics Lab.

**Desired:** None
| **Textbook(s)** | Refer to current academic year printout. |