COURSE DESCRIPTION

Prerequisites: None

Course Description: Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation.

Instruction in three dimensional (3-D) modeling and rendering techniques including lighting, staging, camera, and special effects using Lightwave or equivalent 3D software. Emphasis on 3-D modeling building blocks using primitives to create simple or complex objects. Advanced study in animation software with emphasis on complex photo realistic 3D animation sequences delivered over Internetworking systems will be covered.

This is a 3 credit hour course. (2 lec., 4 lab.)

WECM END-OF-COURSE OUTCOMES: Utilize animation software and production skills; develop a sense of weight and motion in animated shots; and develop animation for multi-media productions, games or simulations.

STUDENT LEARNING OUTCOMES:
Upon successful completion of ARTV 1341, students will be able to utilize Lightwave or equivalent 3D software to:

- Create a 3D object with 4 sided polygons.
- Apply a surface material to a 3D object.
- Render a 3D scene utilizing 2 or more animated objects.
- Build a 3D object according to the instructor’s specifications.
- Utilize critical thinking when solving problems and providing solutions.

COURSE MATERIALS

   (ISBN#: 978-0321766618)
   OR
   Equivalent Text and materials provided from the Internet and other sources.

Storage: A minimum of two (2) CD's or access to cloud storage service (Dropbox, Google Drive)

A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
MAJOR COURSE REQUIREMENT:

Students will participate in **Hands on instruction, Lecture and Lab activities** addressing major topics covered in this course.

Students will produce **Lab Assignments** for the following topics:
- Toolbar Menus
- Objects in layouts
- Storyboarding
- Key Frames
- Object Properties
- Bones and Skelegons
- Motion
- Scene Editor
- Camera Basics
- Image Processing
- Rendering
- Rendering Options
- Post Rendering Operations

Assignments and/or projects produced individually, in pairs, or in small groups will demonstrate an understanding of 3-D Animation, 3-D Modeling and Rendering. Concepts and knowledge will also be evaluated through exams.

SUBJECT MATTER:

Topics covered in the course include:
- Functional uses of 3D Animation
- Basic components of Lightwave or equivalent software
- Work Space
- Toolbar Menus
- Virtual World
- Objects in layouts
- Storyboarding
- Key Frames
- Object Properties
- Bones and Skelegons
- Motion
- Scene Editor
- Camera Basics
- Image Processing
- Rendering
- Rendering Options
- Post Rendering Operations

The instructor of record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.
DISCLAIMER
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student. The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

INSTITUTIONAL POLICIES
All El Centro students are responsible for knowing and adhering to the following institutional and course-related policies:

- [www.elcentrocollege.edu/syllabipolicies](http://www.elcentrocollege.edu/syllabipolicies)
- [Course-related Institutional Policies](http://www.elcentrocollege.edu/syllabipolicies)