

# CS 2324-010 3D Modeling and Animation I

## Fall 2019 Syllabus

**Textbook:**

Michael O'Rourke, Principles of Three Dimensional Animation | ISBN-10: 0393730832 | ISBN-13: 978-0393730838 | Publication Date: January 2003 | Edition: Third Edition

**Required device:**

You will need a USB flash drive of 32 GB or above to store your work.

### General Course Information

**Instructor:** Lopamudra Roychoudhuri

**E-mail:** lroychoudhuri@angelo.edu

**Office:** MCS 205E

**Campus Phone:** (325) 486-5448

**Class Times:** TR 11:00-12:15pm

**Classroom:** MCS 114

**Course Web Site:** Blackboard

**Office Hours:** MW 2:00-5:00 pm, TR 4:00-5:00 pm, F 2:00-4:00 pm.

### Prerequisites

None.

### Course Objectives

This course covers basic techniques of three-dimensional (3-D) modeling and animation utilizing industry standard software. The course includes the creation and modification of 3-D geometric shapes, applying textures; rendering models for animation; and the use of camera and lighting sources. It also provides the student exposure to the principles, terms and explanations in preproduction, modeling basics, rendering basics, and animation basics.

### Student Learning Goals

Students who successfully complete this course will have demonstrated the ability to:

1. Discuss the concepts of pre-production, production, and post production.
2. Define elements such as modeling, rendering, and animation basics.
3. Utilize basic tool sets within modeling and animation software.
4. Analyze and develop texture, lighting, and camera techniques.
5. Apply life-like movement to a character model.
6. Evaluate quality of end-product models and animation.

## Grading

Grading Criteria	Dates	Weights	Goals Assessed
Assignments	Daily/Weekly	25%	1 thru 5
Quizzes	Weekly	5%	1 thru 5
Exam 1	9/24/19	10%	1, 2
Midterm Project	10/31/19	20%	1 thru 4
Exam 2	11/12/19	10%	1 thru 4
Final Project	12/10/19	30%	1 thru 5

GRADE	PERCENT
<b>A</b>	90 - 100
<b>B</b>	80 - 89
<b>C</b>	70 - 79
<b>D</b>	60 - 69
<b>F</b>	0 - 59

## Week by week tentative schedule

Wk	Date	Topics
1	8/27, 8/29	Intro, syllabus, Module 1: Intro to Animation
2	9/3, 9/5	Module 2: Intro to LightWave
3	9/10, 9/12	Module 3: Modeler
4	9/17, 9/19	Module 3: Modeler cont.
5	9/24, 9/26	<b>Exam 1 on 9/24;</b> Module 4: Layout, Surfaces & Textures
6	10/1, 10/3	Module 4: Layout, Surfaces & Textures cont.
7	10/8, 10/10	Module 4: Layout, Surfaces & Textures cont.
8	10/15, 10/17	Module 5: Lights & Camera; Midterm Project Proposal due on 10/17
9	10/22, 10/24	Module 5: Lights & Camera cont.; Midterm Project Model due on 10/24
10	10/29, 10/31	Module 6: 3D Animation; <b>Midterm Project due on 10/31</b>
11	11/5, 11/8	Module 6: 3D Animation cont.;
12	11/12, 11/14	<b>Exam 2 on 11/12;</b> Module 7: Bones
13	11/19, 11/21	Module 7: Bones cont.; Final Project Proposal due on 11/19
14	11/26	Module 8: Dynamic Scenes; Final Project Model due on 11/28
15	12/3, 12/5	Module 8: Dynamic Scenes cont.; Final Project Scene due on 12/5
16	12/10	<b>Final Project</b> (Tue 12/10 10:30-12:30pm)

## Class Policies

### TEAMS

You will form teams of 2 or 3. The teams will be chosen on the first day of class, and will be maintained till the end of semester.

## PROJECTS

You will work as a team on two projects. The midterm project will be on modeling, textures and lighting. The final project will be a 15 second animation with multiple characters using all aspects of modeling and animation. There is no final exam - the final project will be treated as the final exam. The submission and presentation of the final team project will take place on the final exam day. The final team project must be presented on its assigned date and time.

## ASSIGNMENTS

- There will be several kinds of assignments that you will complete in and out of class.
- In-class assignments: these fall in two categories:
  - In-class quizzes: You will complete some reading from the textbook or other sources prior to every class session. The reading will be announced beforehand. This is to ensure that you are familiar with the topics that will be discussed in the class. This may be validated by the in-class quizzes that may be team-based or individual. The grade from the quizzes will constitute 5% of the total grade.
  - Class work Assignments: We will discuss topics in class and work on assignments. You will be able to collaborate with your fellow students in order to complete these. Assignments that could not be completed in class will be taken out-of-class and turned in. The grade from these assignments will constitute 30% of the total Assignment grade.
- Graded homework assignments - the purpose of the homework assignments is to give you individual out-of-class practice on the topics that you are learning, and to explore some ideas more deeply. The grade from the homework assignments will constitute 70% of the total Assignment grade. All assignments will be treated with equal weight in overall grade computation.
- All assignments, unless otherwise specified, must be submitted to Blackboard along with your name, course name, the title of the assignment and the due date.
- *No late assignment will be accepted. No e-mail or in-person submission is accepted.* There are no exceptions to this rule.
- All homework assignments should be the work product of each individual. Cheating occurs when a student either submits work for a grade that is not entirely due to his/her own effort or allows others to use her/his work. Cheating occurs when a student submits work product that is copied from another student. Cheating on an assignment or exam will result in a failing grade for the course. No student shall look towards the work of any other student during exams as it shall be construed as cheating.
- **Academic Honor Code:** Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available on the web at [Academic Honor Code](#)<sup>i</sup> in [Student Handbook](#)<sup>ii</sup>. You should familiarize yourself with it. If a student violates this policy in any way, the student may receive a sanction of failure on the assignment/exam or failure in the course. If you have questions about appropriate citations, please ask.

## **EXAMS**

There will be two exams during the semester. All students must take all the exams at the scheduled times. There are no makeup exams. Only exception will be student absence for observance of religious holy day (see below).

## **ATTENDANCE**

Attendance is mandatory (*no excused absences*) and roll will be taken.

## **GRADEBOOKS**

During the course of the semester, you are expected to monitor your performance on assignments and exams by accessing your grades online. It is your responsibility to: (1) insure that correct entries have been made into the gradebook, and (2) be aware of your performance in the class. Grade percentages are shown on this syllabus so you can compute your own grade standing as the semester progresses.

## **E-MAIL**

You are required to obtain an e-mail account. If you have any question about the course or need assistance, please contact me in person or by telephone during office hours, or by e-mail at any time.

## **LAB POLICY**

No food or drinks are allowed in the lab.

## **General Policy Statements**

### **Academic Accommodations**

Persons with disabilities that may warrant academic accommodations must contact the Student Life Office, Room 112, University Center, in order to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made.

### **Add/Drop Dates**

Students may add this course up to August 29, 2019.

Students may drop this class or withdraw from the university until October 31, 2019.

### **Student Absence for Observance of Religious Holy Day**

1. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.
2. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

3. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

### **Modifications to the syllabus**

The instructor and the university reserve the right to modify or change the syllabus (schedule, course requirements, grading policy, etc.) as the curriculum and/or program require(s).

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<sup>i</sup> <https://www.angelo.edu/student-handbook/code-of-student-conduct/misconduct.php>

<sup>ii</sup> <https://www.angelo.edu/student-handbook/>