

CS 2324-010 3D Modeling and Animation I

Fall 2021 Syllabus

Textbook:

Michael O'Rourke, Principles of Three-dimensional Computer Animation: Modeling, Rendering, and Animating with 3D Computer Graphics | 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: MWF 11:00-11:50 am

Classroom: MCS 115

Course Web Site: Blackboard

Office Hours: MWF 3:00-5:00 pm, TR 3:30-5:30 pm, on Blackboard Collaborate

Precautionary Measures against COVID-19

Please refer to this [Health and Safety web page](#)ⁱ for updated information about campus guidelines as they relate to the COVID-19 pandemic.

Please continue to follow good hygiene practices and personal health monitoring. Should you suspect you have COVID-19, are experiencing symptoms, or know you have been exposed to the virus, you need to use the [Daily Wellness Screening](#) to report your condition. A link for the form is also available on RamPort, the ASU Mobile app, and ASU website.

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	9/20/21	10%	1, 2
Midterm Project	10/20/21-10/25/21	20%	1 thru 4
Exam 2	11/8/21	10%	1 thru 4
Final Project	12/1/21-12/8/21	30%	1 thru 5

GRADE	PERCENT
A	90 – 100
B	80 – 89
C	70 – 79
D	60 - 69
F	0 - 59

Week by week tentative schedule

Wk	Date	Topics
1	8/23,8/25, 8/27	Intro, syllabus, Module 1: Intro to Animation
2	8/30,9/1, 9/3	Module 2: Intro to LightWave
3	9/8, 9/10	Module 3: Modeler
4	9/13, 9/15, 9/17	Module 3: Modeler cont.
5	9/20, 9/22, 9/24	Exam 1 on 9/20; Module 4: Layout, Surfaces & Textures
6	9/27, 9/29,10/1	Module 4: Layout, Surfaces & Textures cont.
7	10/4, 10/6,10/8	Module 4: Layout, Surfaces & Textures cont.; <i>Midterm Project Proposal due on 10/4</i>
8	10/11, 10/13,10/15	Module 5: Lights & Camera.; <i>Midterm Project Model due on 10/15</i>
9	10/18, 10/20,10/22	Module 5: Lights & Camera cont; Midterm Project Demos on 10/20, 10/22
10	10/25, 10/27,10/29	Midterm Project due on 10/25; Module 6: 3D Animation
11	11/1, 11/3,11/5	Module 6: 3D Animation cont.; <i>Final Project Proposal due on 11/1</i>
12	11/8, 11/10,11/12	Exam 2 on 11/8; Module 7: Bones; <i>Final Project Model due on 11/12</i>
13	11/15, 11/17, 11/19	Module 7: Bones cont.; <i>Final Project Scene due on 11/19</i>
14	11/22	Module 8: Dynamic Scenes;
15	11/29,12/1, 12/3	Module 8: Dynamic Scenes cont.; Final Project Demos on 12/1, 12/3
16	12/8 (Wednesday)	Final Project Demos cont. (Wed 12/8 10:30-12:30 pm)

Class Policies

PROJECTS

You will work on two projects. The midterm project will be on modeling, textures and lighting. The final project will be a 15 second animation 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 project will take place on the last week of class and the final exam day.

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. 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.
- *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. The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).ⁱⁱ (can be found in page 96 of the [Student Handbook](#)ⁱⁱⁱ). You should familiarize yourself with it. Any student found guilty

of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

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 semester, you are expected to monitor your performance on assignments and exams by accessing your grades online. It is your responsibility to: (1) ensure 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 use your Angelo State email account for communicating with me. Check your email frequently for announcements and policy changes. If you have any question about the course or need assistance, please contact me by e-mail at any time. I shall reply within 24 hours. Include the course name and section number in your subject line in your emails to me.

LAB POLICY

No food or drinks are allowed in the lab.

General Policy Statements

Add/Drop Dates

Students may add this course up to August 26, 2021.

Students may drop this class or withdraw from the university until November 22, 2021.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the

application process and requirements, visit the [Student Disability Services website](#).^{iv} The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

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 excused under sec. 2 may not be penalized for absence; however, the instructor may respond appropriately if the student fails to complete assignments satisfactorily.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance at:

Michelle Miller, J.D.
Special Assistant to the President and Title IX Coordinator
Mayer Administration Building, Room 210
325-486-6357
michelle.miller@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.^v

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).

ⁱ <https://www.angelo.edu/covid-19/returning-to-campus/health-and-safety.php>

ⁱⁱ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21>

ⁱⁱⁱ <https://www.angelo.edu/current-students/student-handbook/>

^{iv} <https://www.angelo.edu/services/disability-services/>

^v <https://www.angelo.edu/services/title-ix/>