

The University of Texas at Tyler
CSCI 4332 Syllabus

Instructor	David Alger
Course Number:	CSCI 4332
Course Title:	Modern Programming (Game Development)
Meeting Times:	TuTh 10:50AM-12:20PM (May 9 – Aug 6)
Course Description:	Students in this course will develop a proficiency in the use of a modern 3D engine to develop games. No programming experience is necessary, although it is encouraged as some programming will be done. No game engine experience is required.
Pre-requisites:	COSC 1336 or COSC 1315
Credits:	3
Text(s):	None
Languages Used: (If applicable)	Custom language used within the engine will be taught
Topics Covered include but are not limited to:	Introduction to Game Engines, Materials (Textures), Landscapes, Geometry Mode, Foliage Mode, Binary Space Partitions, Static Meshes, Game Scripting
Additional Materials:	<ul style="list-style-type: none"> • USB storage device may be required. Without it, students will have very long download times.

Grading and Evaluation	
1. 60 % - Labs	2. 20% - Projects
3. 20% - Policy Adherence	
Mr Alger's Contact Information UTT Email: dalger@uttyler.edu Office Hours will be by appointment	
Please check the Academic Calendar at www.uttyler.edu for last date to withdraw from class with an automatic "W" and for holiday and final exam dates.	
Course Objectives¹: By the end of this course students are expected to:	
1.	To gain familiarity with a Game Engine from a game designer's perspective
2.	To understand the relationship between textures and materials and procedures for transforming textures into materials
3.	To understand binary space partitions and their relationship to game mechanics and to transform binary space partitions into static meshes
4.	To understand static meshes from a 3D game artist's perspective
5.	To adjust binary space partitions using geometry mode and to optimize shapes using this mode
6.	To place numerous static meshes correctly using foliage mode
7.	To understand basic scripting and features of the engine that support scripting

Plagiarism: Unless otherwise specified, all work submitted for a grade must be completed by yourself - no group effort. Plagiarism will result in disciplinary actions. To spare yourself accusations of plagiarism-

1. Do not show another student a copy of your work before it has been graded. The penalties for permitting your work to be copied are the same as the penalties for copying someone else's work.
2. Do not leave printouts of your work where other students may pick them up.

Accommodation of disabilities: Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her ability should contact me personally as soon as possible so we can discuss accommodations that might improve your educational experience.

Grading Details:

- 1) **Labs (approximately 7):** Lab assignments will be split into three parts. Each part is discussed in detail below:
 - a. **Part 1:** This part will be composed of a lecture and will be completed together in class. Its purpose is to introduce new concepts and show details that are difficult to convey with text. It is worth 30% of the lab grade and is graded based on whether it is done, so the only possible grades are 0 and 30. Students who miss the lecture are expected to complete this lab on their own.
 - b. **Part 2:** This part will be composed of text instructions with or without pictures included. Its purpose to introduce advanced concepts that build on part 1. It is worth 30% of the lab grade and is graded on whether it is done. Note that part 2 builds on part 1, so part 1 must be complete (and graded) before starting on part 2. Students are expected to spend class time to complete part 2 of the lab. After completing part 2, students will have a 60% on the lab.
 - c. **Part 3:** This part will be composed on purposely ambiguous instructions, which leave a little room from creativity. Completing the requirements is worth half of this part (ie, 20%), and creativity and use of the tool set in a creative manner is worth the remaining 20%. Students can continue to submit Part 3 until they have a 100% on the lab. Parts 1 and 2 of the lab must be completed before any part of part 3 is graded. Students are expected to spend class time to complete part 3 of the lab.
 - d. **Possible Grades:** On the labs, there are a limited number of grades available. They are:
 - i. **0%** – No part of the lab is complete
 - ii. **30%** - Part 1 of the lab is complete and graded
 - iii. **60%** - Parts 1 and 2 of the lab are complete and graded
 - iv. **80%** - All parts of the lab are complete and graded
 - v. **> 80%** - All parts of the lab are complete and graded
- 2) **Projects (approximately 2):** Project assignments will have a complete grading rubric attached. Students will have at least 2 weeks to complete projects. Projects are expected to be completed on the due date and will have severe penalties for lateness. Please see canvas for details. Note that if there are 2 projects, they are worth 10 points each to your

final grade. For students without an adequate computer to run the engine, I expect the classroom(s) to be open most of this semester.

3) Policy Adherence: Students will be expected to adhere to the following policies. Points will be deducted if they are not. Note that you may lose up to 20% of your final grade for failure to adhere to these policies.

a. Attend class on time and for the entirety of the class. Exceptions will be made, of course, but students will be penalized if they miss more than 4 class periods at a rate of 2 points per unexcused absence to a maximum of 20 points. For purposes of this grade, failure to attend part of the class will count as $\frac{1}{2}$ of an absence.

b. Help or receive help from others. This is NOT optional, and I will grade extremely harshly on this matter. AAA game development is a team activity and your ability to work in groups is of the utmost important. Helping others helps reinforce your knowledge and seeing other's work can help inform you of new ways to do things and grant ideas for creative input. Receiving help is just as serious a matter. Do not try me on this! I prefer to work alone too! Exceptions will be made ONLY if you have a registered disability that is relevant. After submitting parts 2 or 3 of a lab, you may be assigned to help someone. You are to help that person until they are ready to submit whatever part of the lab they are on. After helping, you should inform me that the helped student is **completely** ready to submit and return to desk to continue to your own labs. Students will be informed if they lose points for failure to adhere to this policy.