# **The University of Texas at Tyler**

# **COSC 4390 001 Syllabus**

|  |  |
| --- | --- |
| Instructor | David Alger |
| Course Number: | COSC 4390 |
| Course Title: | Special Topics in Computer Science (Game Development II) |
| Meeting Times: | Monday, Wednesday, and Friday 10:10-11:05 |
| **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 1337 |
| 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:** | * 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:   Monday through Friday 11:10-12:10 **or by appointment** |
| Please check the Academic Calendar at [www.uttyler.edu](http://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 6):** Lab assignments will be split into two parts. Each part is discussed in detail below:
	1. **Part 1:** This part will be composed of written instructions with or without pictures included. 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 are expected to spend class time to complete part 1 of the lab.
	2. **Part 2:** This part will be composed of text instructions with or without pictures included. Its purpose is 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.
	3. **Part 3:** This part will be composed of text instructions usually **without** pictures. Its purpose is to further introduce advanced concepts that will build on part 2. It is worth 40% of the lab grade and is graded on whether it is done. Note that part 3 builds on part 2, so part 2 must be complete (and graded) before starting on part 3. Students are expected to the spend class time **and homework time** to complete part 3 of the lab. After completing part 3, students will have a 100% on the lab.
	4. **Possible Grades:** On the labs, there are a limited number of grades available. They are:
		1. **0% –** No part of the lab is complete
		2. **30% -** Part 1 of the lab is complete and graded
		3. **60% -** Parts 1 and 2 of the lab are complete and graded
		4. **100% -** Parts 1,2, and 3 of the lab are complete and graded
2. **Projects:** 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.
3. **Policy Adherence:** Students will be expected to adhere to the following policies. Points will be deducted if they are not. Note that students may lose up to 20% of your final grade for failure to adhere to these policies.
	1. **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 2 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 ½ of an absence.
	2. **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 importance. 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 1, 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 your desk to continue to your own labs. Students will be informed if they lose points for failure to adhere to this policy.

**Plagiarism:**

Plagiarism will result in disciplinary actions. To spare yourself accusations of plagiarism review the following statements: (Adapted from SFSU Department of Computer Science cheating and plagiarism policy)

*Plagiarism occurs when a student:*

• submits the work of another student representing it a their own.

• allows another student to replicate or submit their work.

• submits code or portions of code with modifications in an effort to make it look original.

• fails to inform the instructor of collaborating with others on code or projects.

• posts assignments on internet sites for solutions.

• submits code found online and modified without proper citation.

• submits code found online with and used verbatim regardless of proper citation.

*Plagiarism does not occur when a student*

• has permission to collaborate on a program or project and list all collaborators.

• receives guidance from instructors or teaching assistants

• help with errors or provide tips on programming that will help others in the learning process.

• discuss requirements of an assignment and strategies for implementation

• inclusion of code copied form another source when properly cited and specifically allowed by instructor

**University Policies:**

 The following pages may be revised without notice. These policies can be found on UT Tyler’s website: <http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf>

*UT Tyler Honor Code* – Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

*Student Standards of Academic Conduct* – Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

“Cheating” includes, but is not limited to:

• copying from another student’s test paper or homework assignment;

• using, during a test, materials not authorized by the person giving the test;

• failure to comply with instructions given by the person administering the test;

• possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed “crib notes”. The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test

• using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;

• collaborating with or seeking aid from another student during a test or other assignment without authority;

• discussing the contents of an examination with another student who will take the examination;

• divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors have designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;

• substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;

• paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;

• falsifying any academic work offered for credit;

• taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another person, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and

• misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

Unless otherwise specified, all work submitted for a grade must be completed by yourself. You are not to submit another person’s work and claim it as your own. Plagiarism and/or collusion 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.

**Students Rights and Responsibilities** – To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/rightsresponsibilities.php>

**Campus Carry** – We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <http://www.uttyler.edu/about/campus-carry/index>.

**UT Tyler a Tobacco-Free University** – All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit [www.uttyler.edu/tobacco-free](http://www.uttyler.edu/tobacco-free).

**Grade Replacement/Forgiveness and Census Date Policies** – Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. (For Spring, the Census Date is Jan. 30.) Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester’s Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract. The Census Date (Jan. 30th) is the deadline for many forms and enrollment actions of which students need to be aware. These include:

• Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.

• Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date) • Schedule adjustments (section changes, adding a new class, dropping without a “W” grade)

• Being reinstated or re-enrolled in classes after being dropped for non-payment

• Completing the process for tuition exemptions or waivers through Financial Aid

**State-Mandated Course Drop Policy** – Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

**Student Accessibility and Resources** – In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University offers accommodations to students with learning, physical and/or psychiatric disabilities. If you have a disability, including non-visible disabilities such as chronic diseases, learning disabilities, head injury, PTSD or ADHD, or you have a history of modifications or accommodations in a previous educational environment you are encouraged to contact the Student Accessibility and Resources (SAR) office and schedule an interview with the Accessibility Case Manager/ADA Coordinator, Cynthia Lowery Staples. If you are unsure if the above criteria apply to you, but have questions or concerns please contact the SAR office. For more information or to set up an appointment please visit the SAR office located in the University Center, Room 3150 or call 903.566.7079. You may also send an email to cstaples@uttyler.edu.

**Student Absence due to Religious Observance** – Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

**Student Absence for University-Sponsored Events and Activities** – If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time, the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement** - It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation** - Everyone is required to exit the building when a fire alarm goes off. Follow your instructor’s directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

**UT Tyler Resources for Students**

UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu

UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu

The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.

UT Tyler Counseling Center (903.566.7254)