CSCE 4220/5260 Game Programming 2

Instructor: Curtis Chambers    Semester: Spring 2023
Office: NTDP E260L    Time: TR 1:00-2:20pm
Student Hours: TR 10:00 AM - 12:00 PM    Place: NTDP F204
Email: Curtis.Chambers@unt.edu

Contacting Requirements:

When contacting the instructor or course assistance staff (TA, IA, etc.), the following is required:

- Sent from a UNT Email
- Sent to my work email (above)
- Must have the Course Number AND Section (i.e., 2110.212) in the Subject Line or appropriate field.
- Subject Line should be short and to the point.
- Body must be detailed, legible, and respectful.
- Please give at least 2 business days for a response, prior to any follow up email.

Emails, messages, and the like that fail to remain in compliance with the above standards may impact efficiency of communication or (in the worst case) result in no reply.

When disputing a grade, contact the grader for the assignment first (you should see a comment from the grader in Canvas). Should the grader be an IA or TA and you still wish to dispute the grade, then you should elevate it to me. The TA/IA staff has been instructed to do the same. At that time, I recommend REPLY ALL and adding me to the list of recipients. This will give me access to the entire email chain between you and the grader which will help me get a better understanding of the dispute.

Canvas:

This course will be using Canvas to distribute course materials, post grades, and submit assignments. Check regularly for course work and announcements.

Canvas messages, while convenient, are not checked as often as my work email. I recommend that you do not use this method to contact me.

Course Description:

This class will cover 3D game programming with the Unreal Engine 4. Students will have access to the full Unreal source code. Class meetings will generally consist of a lecture and a hands-on tutorial. Class attendance is mandatory. Grades will be based on the completion of the class tutorials, assignments, presentations, and a final project.

Draft Schedule

Week 1: Introduction
Week 2: Unreal Engine Basics
Week 3: Unreal Engine Programming
Week 4: Character Setup 1
Week 5: Character Setup 2
Week 6: Triggers and Matinee
Week 7: Blueprints, Top-Down, and Projectiles
Week 8: Ray Tracing and Interfaces
Week 9: Swimmable Water
Week 10: Basic AI, Navigation, and Sound Cues
Week 11: HUD and Text  
Week 12: TBA  
Week 13: TBA  
Week 14: Project presentations  
Week 15: Project presentations  

Learning Outcomes  
1. Knowledge of the basic techniques of 3D game programming.  
2. Experience working with a commercial grade game engine.  
3. Ability to program a 3D game.  
4. Experience with programming using a very large code base.  

Course Requirements  
Attendance: Required.  
Exams: None.  
Grade: Tutorials, assignments, presentations, and a final project.  

Accommodations:  
THIS DOES NOT APPLY TO ODA ACCOMMODATIONS. (These are processed through the ODA Office)  
Should you want me to provide accommodations (such as make up work) for an unavoidable absence or impact, you must use this process:  
1. Email me and your assigned TAs/IAs from your UNT email.  
   This is to notify us about the absence “pending” an excused (or validation) document from the Dean of Students Offices.  

2. Contact the Student Affairs Office.  
   Email: DEANOFSTUDENTS@UNT.EDU  
   Phone: 940-565-2648  
Note that the DoS offices only request accommodations and do not enforce them. Patiently work with them to verify the validity of the excused absence or impact on your studies. Once their offices process the details with you, they should provide you with a document and/or contact me. Should you get a document, send it to me via UNT email and keep the physical copy for your records.  
I'll need these document(s) before I can provide accommodation. This process will keep us both in compliance with UNT standards, practices, policies, and procedures while being the most efficient and private method.  
If you have questions, please visit me during my office hours or schedule a meeting with me.  

Grading Policy  
Grading is, for the majority, binary. In that you either completed all tasks required on time or you did not. Late assignments are accepted at half credit if received within 1 week of their due dates.  
Grade disputes are permitted up to 1 week after the grade has been posted.  

Assignments
Tutorial Assignments: Completion of these correctly and on time will be reflected in your final grade.

Productivity Assignments: Throughout the semester students will keep track and present their productivity on their projects.
- Setup and Coding at Home
- Project Schedule

Presentations: Students will perform Milestone Presentations in lecture. Presentations must be uploaded before lecture.
- Pitch
- Milestones

Final Project: At the end of the semester, each project will be demonstrated to the professor. A schedule will be posted towards the end of the semester. The final project is your final grade.

Your final grade will reflect:
- The quality of your game,
- The contribution you made to it,
- The use of revision software,
- Your performance and attendance during presentations,
- Your final presentation, and
- Your performance on the remain class assignments.

If you do not submit and present a Final Project on time, the highest grade you can receive in this course is an F.

Letter Grade Bump and Penalties

After you receive your Final Project grade, “bumps” and “penalties” are then applied to your final grade for the course.
- Each assignment is worth 1 point. Late assignments merit half credit. If you fully complete all assignments on time: you will receive a letter grade bump to your final grade.
- For each one-third (1/3) of missing points—be they from missing or late assignments—you should expect a letter grade penalty to your final grade. (I.E., if there are a total of 15 graded assignments at the end of the semester, then for each 5 points missing a letter grade penalty is applied)
- Failure to use a revision control system or practice (GitLab and/or TortoiseSVN) throughout the entire semester will result in a letter grade penalty.
- Note that the Final Project Submission at the end of the semester has strict requirements that can impact your Final Project Grade.

The max bump you can receive is a 1. The max penalties you can receive is 4.

Disability Accommodation

The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring
accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class.

**Course Policies**

**Academic Misconduct**

The department, college, and university have very strict guidelines regarding academic misconduct. Students are expected to submit their own work on all individual assignments.

- You are allowed to discuss solutions, but do NOT work with other students on shared program solutions. Do NOT use even partial program solutions from the Internet without properly citing them. **Do NOT recycle a complete game.** You may integrate code or follow development strategies from any legal source as long as you **properly cite your resources**. **Failure to do so is considered cheating.**
- You will be graded on your contribution to the code. Be honest – attribute your work. Using code without acknowledging it to the instructor is **cheating**, and will be dealt with in accordance to the departmental cheating policy.
- If it is determined that you have cheated, the first instance of cheating in the class will result in a grade of **ZERO on the assignment** in question. The second instance of cheating in the class will result in a **grade of F** in the class.
- You need to do your own work on your final project as well. Here there should be no ambiguity at all.
- In case the above description, and in-class discussion of my views on appropriate and inappropriate collaboration does not answer all of your questions, please look at the university Student Rights and Responsibilities web page.
- You are responsible for the information covered in class, whether you attend class or not. Individualized lectures will not be given. Please check with other class members for any notes that might have been missed during an absence. Attendance **WILL** be taken in lecture and your attendance is strongly recommended to improve your opportunity to meet course objectives.
- Students should expect an "in-lecture" lab program each week. The program will be submitted before that lab session is complete.
- There will be a minimum of two Milestones to check-up on the progress of your final project; each with increasing requirements to ensure that you are working on your project.
- Progress on your final project should start by the first week of class. The software used is available for home use. Lab Access Hours will be posted by the third week of classes. With both, you are fully expected to have the ability to work on your project outside of class. Students who plan to have difficulty with this should meet with me before the end of the second week of classes.
- Each student should adhere to the university's student code of conduct.

**Academic Integrity**

Below I have taken out two paragraphs from UNT Policy 06.003 Student Academic Integrity.

“UNT promotes the integrity of learning processed and embraces the core values of trust and honesty. Academic integrity is based on educational principles and procedures that protect the rights of all participants in the educational process and validate the legitimacy of degrees awarded by the university. In the investigation and resolution of allegations of student academic dishonesty, the university’s actions are intended to be corrective, educationally sound, fundamentally fair, and based on reliable evidence.”
“Students are expected to conduct themselves in a manner consistent with the university's status as an institution of higher education. In the class setting, students shall follow their instructors’ directions and observe all academic requirements published in course syllabi and other course materials. A student is responsible for responding to an academic dishonesty report issued by an instructor or other university official. If a student fails to respond after proper attempt at notification, the university may take appropriate academic actions in the absence of the student.”

UNT policy 06.003 defines the following breaches of academic integrity:

A. **Cheating.** The use of unauthorized assistance in an academic exercise, including but not limited to:
   a. use of any unauthorized assistance to take exams, tests, quizzes or other assessments;
   b. usage of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; usage without permission, of tests, notes, or other academic materials belonging to instructors, staff members, or other students of the university;
   c. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor;
   d. any other act designed to give a student an unfair advantage on an academic assignment.

B. **Plagiarism.** Use of another’s thoughts or words without proper attribution in any academic exercise, regardless of the student’s intent, including but not limited to:
   a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgement or citation.
   b. the knowing or negligent unacknowledged use of materials prepared by another person or by an agency engaged in selling term papers or other academic materials.

C. **Forgery.** Altering a score, grade or official academic university record; or forging the signature of an instructor or other student.

D. **Fabrication.** Falsifying or inventing any information, data or research as part of an academic exercise.

E. **Facilitating Academic Dishonesty.** Helping or assisting another in the commission of academic dishonesty.

F. **Sabotage.** Acting to prevent others from completing their work or willfully disrupting the academic work of others.

**Cheating of any sort will not be tolerated in this course.** All submissions must be your own original work. Taking information or code from the internet or other students is considered a breach of academic integrity. Failure to adhere to these strict standards will be cause for disciplinary action that could be as severe as expulsion from the university. If it is determined a student cheated on any assignment in this course they will receive an F for their final course grade and an academic integrity report will be filed with the Office of Academic Integrity.

Further, UNT is now maintaining a database recording any acts of academic dishonesty that is available to employers. Additionally, because these are group projects, if one group member is caught cheating the consequences of their actions will extend to the group (as a whole). It is the responsibility of all group members to ensure that when they put their names on their submission as a whole and submit it, the submission does not contain any instances of cheating. Failure to report known instances of cheating within a group will be deemed facilitation of academic dishonesty and reported as such. For more information see the UNT Student Academic Integrity Policy.
Collaboration Policy:

For each submission, all work is expected to be your own unless permitted by the instructor. While you might be working with your group members, you are not to collaborate with other groups for projects, provide solutions to other groups, search for solutions on the internet, or purchase solutions. Doing so will be deemed a breach of academic integrity. However, for any non-graded, practice assignments students are encouraged to work together to solve problems.

Academic Freedom and Academic Responsibility

Refer to UNT Policy 06.035

Academic freedom and academic responsibility give vitality to the UNT and its mission. As such, the academic freedom to be able to freely consider or investigate important, and, perhaps, controversial questions are essential to the education of students and advancement of knowledge. Faculty have the academic responsibility to subject their knowledge and postulates to rigorous review by peers who are experts in the relevant subject material, to have a firm foundation of their postulates in the most relevant and suitable available evidence, and to work with one another to provide the best education possible for our students.

Syllabus Revisions

This syllabus may be modified as the course progresses should the instructor deem it necessary. Notice of changes to the syllabus shall be made through Canvas and/or class announcements.

Excused Absences

Students are expected to schedule routine appointments and activities so as not to conflict with attending class. However, some absences cannot be prevented. In the event of a medical emergency or family death, etc., students must request an excused absence as quickly as feasible following the event. Use common sense. Students must provide documentation that verifies the reasoning for the excused absence.

Emergencies

By definition, emergencies cannot be planned for. Your instructor attempts to make accommodations in these instances that allow for making up missed work and completion of the course in a timely manner. Students must provide documentation that verifies the emergency.