CSCE 4250/5265 Advanced Topics in Game Development

Name:	**Jonathon Doran**
Student Hours:	**Mon 11:00am to 1:00pm, Thursday 10:00am to 12:00pm. In E250J**
	You may request additional appointment times by emailing me.
Email:	**Jonathon.Doran@unt.edu**
Class Meets:	**Tues/Thurs 2:30pm – 3:50pm NTDP F204**
Final Exam:	**Demos on Tues 5-May 12:30pm to 2:30pm in NTDP F204**

Communication Expectations: The best way to reach me outside of class/office hours is via email. During the week I will try to respond to your email within 24 hours. During the weekend, response time may be longer. This includes personal concerns or questions about the class or an assignment. The TA's and I strive to get grades back around 1 week from the due date, though that is not always possible when the class is large. Communication is expected to be professional and respectful. Online Communication Tips (https://clear.unt.edu/online-communication-tips) are available. **Please include "CSCE 4250" or "CSCE 5265" in the subject line of all emails.** I get a lot of email, and messages with a proper subject line will be filtered into a special folder for this class. If you do not follow this direction, your message might end up in my junk folder.

Course Description

Advanced topics in game development, possibly including but not limited to character animation, procedural content generation, shader techniques and graphics special effects. Discussion of articles from the recent academic and technical literature on game development and related material from relevant computer science areas.

Course Prerequisites or Other Restrictions

CSCE 4210 (Game Programming I) with a grade of C or better.

Course Objectives

Course outcomes are measurable achievements to be accomplished by the completion of a course. These outcomes are evaluated as part of our ABET accreditation process. By the end of this course, students will be able to:

1. Ability to perform a literature search for academic game development articles.
2. Ability to formulate a game development related project using forward-looking academic articles.
3. Ability to devise metrics for measuring the viability of a game development related project.
4. Experience with writing code for and evaluating those metrics.
5. Experience with interpreting and pitching the results to a game development team.

Tentative Course Calendar

Week	Date	Topics
1	Jan 13 / 15	Course Intro & Project Ideas
2	Jan 20 / 22	Research Methods & Metric Design
3	Jan 27 / 29	Project pitches
4	Feb 03 / 05	Lecture/Briefings
5	Feb 10 / 12	Student Presentations
6	Feb 17 / 19	Student Presentations
7	Feb 24 / 26	Student Presentations
8	Mar 03 / 05	Lecture/Briefings
9	Mar 10 / 12	Spring Break
10	Mar 17/19	Lecture/Briefings
11	Mar 24 / 26	Lecture/Briefings
12	Mar 31 / Apr 02	Lecture/Briefings
13	Apr 07 / 09	Lecture/Briefings
14	Apr 14 / 16	Lecture/Briefings
15	Apr 21 / 23	Lecture/Briefings
16	Apr 28 / 30	Lecture/Briefings
F	May 5, 2026	Demonstrations (12:30pm – 2:30pm)

Lectures cover rotating technical game topics. For each lecture every student must upload one Decision Brief slide (one technical decision, one-line rationale, one explicit ask) at least 48 hours before class. You must be present for the scheduled discussion to receive credit for that slide; absence forfeits that week's credit.

Grading

I guarantee that these percentages will be the maximum required for a letter grade. I usually lower these as needed to avoid having a large number of students on a grade boundary. Anyone I feel is on a boundary will receive the higher of the two grades.

A = 90% - 100%
B = 80% - 89%
C = 70% - 79%
D = 60% - 69%
F = 0% - 59%

Note that graduate students are expected to complete more complex and technically advanced projects and may include original research. This includes citing relevant research literature, improving existing techniques, and exploring new problems. I expect to see a high degree of self-directed learning and intellectual curiosity.

ALL requests for extensions on assignments must be made prior to the due date and must be for a valid "emergency" reason. In extreme circumstances, contact after the due date may be accepted if there is a **COMPELLING** reason (and yes COVID counts).

Grade Components

Component	Percentage of Final Grade
Team Project	80%
Technical Talk	10%
Decision Brief Participation	10%

Course Evaluation

Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. When SPOT becomes available (generally in the last week or so of the course) you will receive an email. I offer a small amount of extra credit if class participation is over 80% of the students.

Syllabus Change Policy

The instructor reserves the right to change the course as needed, specifically (though not limited to) the case of topics, due dates, and assignments/assessment items. Any changes are done after careful consideration of the course objectives and student progress.

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

All department policies on Academic Integrity and Student Conduct apply for this course – these are available at the following link:

https://engineering.unt.edu/cse/students/resources/academic-integrity.html

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website (https://disability.unt.edu/).