GAME 310 Digital Game Design
Spring 2024 – Section K01
Tuesday/Thursday 9:00 – 10:15 AM, G313

Instructor and Contact Info

- Instructor: John P. Doran
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- Discord: netravelr#2081

- Office Hours: Tuesday/Thursday: 10:15 - 11:30 PM (in #G551)
  Or by appointment in person or on Discord
- General Notes: Feel free to contact me with any questions or concerns, or just to chat about the course, games, and the like. **The best contact method is via Discord or e-mail.** I will normally reply to all course related e-mails with 24 hours (48 hours during weekends and holidays).

Course Description

This course is for Computer Game Design Majors and it expands on the knowledge established in GAME 210 and 230 while introducing Unreal Engine 5.

Learning Outcomes

Students who complete this course will:

1) Have an introductory knowledge of level design using the Unreal Engine.
2) Have a basic understanding of scripting using Blueprint.
3) Have a basic understanding of using animation and cinematics in Unreal Engine.
4) Have a basic understanding the tools used in Unreal Engine.
5) Have the experience of working in a team environment on a modern game engine.
6) Learn the basic pipeline to import art assets from other programs into Unreal Engine.

Requirements and Evaluation

Students should come to class prepared to discuss any and all material covered in the assigned readings. Classes will consist of lectures, discussions, and lab work.

Students will show their knowledge and mastery of the material by creating both a solo game (mid-term) and a team game (final), along with several related projects. These assignments will be spread evenly throughout the semester. A schedule and assignment list are included in this syllabus. Further details can be found on Blackboard.

Students' final grades are calculated by comparing their scores to the maximum possible score. The breakdown is as follows:

- 40% - Projects and Assignments

- 25% - Mid-Term Game Project
- 25% - Final Team Game Project
- 10% - Class Participation / Attendance

- A: 90–100
- B: 80–89.9
- C:70–79.9
- D: 60–69.9
- F: 0–59.9

Course Schedule and Assignments

Start Date	Section Name	Due Date
2/19	Intro to Unreal • Reading Assignments • Syllabus Quiz • In-Class Activities	2/25
2/26	Creating an Environment • Reading Assignments • In-Class Activities • Environment Recreation Assignment	3/11
3/12	Adding to Your Environments • Reading Assignments • In-Class Activities • Landscape Assignment	3/25
3/26	Making a Simple Game • Reading Assignments • In-Class Activities • Mid-Term Game Project	4/8
4/9	Planning Your Game • Reading Assignments • In-Class Activities • Design Document Assignment	4/22
4/23	Alpha Build • Reading Assignments • In-Class Activities • Alpha Presentation	5/6
5/7	Beta Build • Reading Assignments • In-Class Activities • Beta Presentation	5/20

5/21	Finishing Your Game • Reading Assignments • In-Class Activities • Final Game Project and Presentation o See GMUK Website for Final Time	Final

University Holidays
3/1 (Wed) - Independence Movement Day
4/8 (Mon) – 4/9 (Tue) - Spring Recess (no classes)
4/10 (Wed) - National Assembly Election
4/30 (Tue) – Make Up Day 1 – Follow Wednesday Schedule, Tuesday classes do not meet
5/1 (Wed) - Labor Day
5/6 (Mon) – Children's Day – Alternative Holiday
5/15 (Wed) – Buddha's Birthday
5/16 (Thu) Make Up Day 2 – Follow Wednesday Schedule, Thursday classes do not meet
6/6 (Thu) – Memorial Day

Required Texts and Materials
A computer with the latest version of Unreal Engine 5 (available for free in the Epic Games Launcher https://www.epicgames.com/store/en-US/download)

Recommended Materials
PC Desktop / Laptop (For working on projects outside of class.)
USB Flash Drive and/or Online File Sharing Account
Discord or Other Chat/Messaging Software
Some type of Git client (I recommend GitHub Desktop https://desktop.github.com/)

Assumptions
It is assumed that students have regular access to email and the Internet. Any issues with email or Blackboard access should be taken up with university ITU. Finally, it is assumed that students are familiar with and have regular access to Microsoft Word and PowerPoint.

Late Work
Unless otherwise noted, all quizzes, assignments, and projects must be submitted no later than 11:59 PM on their due date. Anything submitted after this time will be considered late. They can still be turned in for credit, but for each day a quiz or assignment is late your score will be reduced by 5%. Unless otherwise noted, the final turn in date for late assignments and quizzes is one week after their original due date. After that, they will automatically receive a score of 0. **Note that the final exam and/or and projects generally cannot be accepted late.**

Late work will only be accepted without penalty in the case of a documented medical illness or another serious extenuating circumstance. In such cases, please contact the instructor as soon as possible to discuss the situation.

Class Participation

Students are expected to actively engage in class discussions and activities. While reading assignments and lecture notes will be made available online, in-class lectures and activities will contain additional information, important tutorial and project work, and the like.

The use of laptops, tablets, smart phones, etc. is allowed in-class for the purposes of note taking, following along with the course material, and participating in certain activities. However, all devices must be in silent mode and used in a way that does not disrupt the class or otherwise disturb fellow students.

Online Participation

All course assignments and due dates can be found on Blackboard, along with announcements, lecture notes, and other important information. Many of the assignments must also be submitted via Blackboard. Therefore, it is recommended that students familiarize themselves with Blackboard at the start of the semester and check it regularly. If you have any non-technical questions about Blackboard and how it's utilized as part of the course, don't hesitate to ask.

E-Mail Policy

Students must use their MasonLIVE or gmu.edu email accounts to receive important University information, including messages related to this class. See http://masonlive.gmu.edu for more information.

Students With Disabilities

If you are a student with a disability and you need academic accommodations, please see the professor and contact the Office for Disability Services (ODS) at 993-2474, http://ods.gmu.edu. All academic accommodations must be arranged through the ODS.

Anti-Racism

In the spirit of the great Dr. King, students in this class will be judged not by the color of their skin, but by their character and the quality of their work. Race is not, and should not, be a factor in grading, peer reviews, or any other class related interactions.

Honor Code

To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

Students are expected to follow all University policies and guidelines. Cheating, plagiarism, lying, and stealing are all prohibited. All violations of the Honor Code will be reported to the Honor Committee.

Use of AI

Any material generated by an artificial intelligence (AI) generation tool (such as ChatGPT or Stable Diffusion) is not accepted in this class as "the student's own work," and so will be considered similarly to text published on paper or online or text composed or significantly edited/altered by another person. The use of such text/images/etc. without proper attribution is a violation of academic integrity.

University Catalog

Students are to be aware of the policies listed in the University Catalog: http://catalog.gmu.edu/.

GMU Add/Drop Policy

It is the student's responsibility to check to verify that they are properly enrolled as no credit will be awarded to students who are not. University dates concerning withdrawal can be found in the academic calendar and are not negotiable by the professor.