

GAM 420: Creative Computation

Description:

This workshop introduces game scripting to artists and game designers. A game script is a short list of commands that control something in a game, such as how a character moves, or an enemy's behavior. Students will learn to read, modify, and author scripts that generate and affect a variety of game elements over the course of weekly projects.

Quarter/Year:	AQ 2020
Meeting Time:	M,W 11:50 – 1:20pm
Location:	Zoom, Prerecorded Lectures
Type:	Lecture
Website:	D2L, Discord
Software:	Unity 2020.1.xxx (Use Unity Hub)
Instructor:	William Meyers
Email:	wmeyers@cdm.depaul.edu

Learning Outcomes:

- Students will gain a breadth of understanding of how to design and implement behaviors in games
- Students will learn how to break down common behaviors found in game and implement into their own projects
- Students will be capable of developing some of the most common behaviors found in games, such as movement, projectiles, UI and game management.
- Students will get a better understanding of the relationship between Design and Programming when it comes to creating games.

Prerequisites:

PREREQUISITE(S): GAM 240 or CSC 241 or CSC 242 or CSC 243

Goals:

Success in this course requires consistent and weekly effort. Expect to put in at least 10 hours a week, every week to complete the assignments and get a B or an A. Throughout the course we will be working on several assignments that will allow us to develop the tool necessary in order to build a simple game mod.

Tentative Schedule:

Week 1:	Intro to Unity and Coding
Week 2:	Movement
Week 3:	Physics Basics
Week 4:	Input System
Week 5:	Projectiles
Week 6:	Game Management / Unity Events
Week 7:	UI
Week 8:	Animation
Week 9:	Advance Programming Techniques
Week 10:	Final Project Work Day/Extra Topics

Grading

- 60% Programming Basics
 - 4 – 6 Assignments
- 30% - 1 Projects
 - **GAM 420: Will have extra requirements**
- 10% - Participation
- No Final Exam

How projects and homework are graded according to two criteria:

1. Does it run and meet all of the requirements? This is worth 80% of the grade
2. How creative or impressive is the solution? This is worth 20% of the grade.

If a student turns in a project that runs and meets all the requirements, then she earns 80% or a B for the project. If the student has also solved the project assignment in a creative or impressive way, meaning that she did something unique and innovative in her solution, then she can earn up to another 20%.

Grading Late Projects

Every day a student's project is late will remove 10% points from that project's grade. For example, if a student completes a project of 97% (or A level) quality, but hand it in 12 hours late, she will earn 87% or a B for that project. If she were to hand it in 36 hours late, then she would earn a 77% or a C for that project, and so on.

ATTENDANCE AND TARDINESS

If you miss class, you're responsible for catching up on missed material by referring to Piazza and asking classmates.

Textbooks and printed resources (Recommended):

- [Game Feel, Morgan Kaufmann](#)
- [Learning C# Programming with Unity 3D, Alex Okita](#)
- Mastering Unity Scripting

Software:

[Unity 2020.1.xxx \(Use Unity Hub\)](#)

Collaborating together on programming assignments

- You are encourage to work together
 - Use the Discord forums heavy
 - Even share your material with others in the common directory
- Everyone is 100% responsible for the work they do.
 - If you get help with a section of code,
 - Refactor the code
 - Comment and understand that material
 - Transform the code to make it yours
 - Be able to answer any question regarding the code you commit
- If you gain significant support / help from another student
 - Fully disclose the support / help you had in a Readme.txt file submitted with your assignments.
 - Disclosing the help, is not permission for copying the code.
 - Only there to clarify and acknowledge help you were given from a fellow student.
- If you are stuck and find yourself even tempted to plagiarize
 - Use Discord
 - Visit during offices hours, make an appointment
- Don't ever compromise your integrity!
- NOTE!
 - You must disclose all help or sources you used for your assignments
 - Text file in submission folder
 - If you submit an assignment/project you copied as your own, you will receive an automatic F in the class and will put up for Academic Integrity Violation

Course Policies

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in CampusConnect.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/>. If you have any questions be sure to consult with your professor.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: cdm.depaul.edu/enrollment.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: csd@depaul.edu.

Lewis Center 1420, 25 East Jackson Blvd. Phone number: (312)362-8002 Fax: (312)362-6544 TTY: (773)325.7296

Retroactive withdrawal

This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term.

Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval. Information on enrollment, withdrawal, grading and incompletes can be found at:

<http://www.cdm.depaul.edu/Enrollment-Policies.aspx>