# GDD 200 01: Intro to Game Development

COURSE INFO GDD 200 01

Spring 2021

Tuesday - Thursday, 9:30 am - 10:45 am

Tator Hall, Room 129

http://mywebspace.quinnipiac.edu/jbwarren/200

INSTRUCTOR INFO Jonah Warren

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203.582.7921 CAS 1 316

OFFICE HOURS My office hours are:

Tuesday and Thursday, 1:00 PM - 2:00 PM

All other times by appointment. I'm available via email during the week (Monday-Friday) and will try to respond to emails within 48 hours. Emails received on the

weekend will be responded to by the beginning of the following week.

DESCRIPTION This course provides a practical, hands-on overview of game development.

Students learn how to make games from scratch by using a game engine to code behaviors and manipulate assets. Individual development concepts will be introduced incrementally. Students will be asked to demonstrate their understanding of these concepts through creative project work. Some

programming experience is required.

LEARNING OUTCOMES Students in GDD 200 will:

· Learn the how to use the Unity game engine;

• Learn how to make game from scratch using code and assets;

Learn the basics of C#.

PHILOSOPHY Creating a digital game is a complex undertaking. Although game engines

simplify the process, they have a steep learning curve. By starting from scratch and focusing on individual topics in isolation, this class allows students to learn incrementally, slowly increasing their knowledge, abilities, and confidence. Daily exercises give students hands-on experience solving problems within the engine, quizzes ensure students retain essential material, and individual projects ask students to creatively apply this knowledge, encouraging them to combine what

they have learned in new and different ways.

STRUCTURE The class will be divided into six two-week modules. Each module will cover a

different aspect of the Unity engine (e.g., physics, prefabs, ui, animation). Each

module will consist of three days of lecture and in-class work, a quiz, and an assignment set. Assignment sets will be due at the conclusion of each module and will consist of three exercises and one larger project. Projects are the most important part of class and should be treated as such. It gives students the opportunity to use the knowledge gained in class and incorporate it into their own creative process. During the last two weeks of class, students will take one of their previous projects and expand upon it.

WEBSITES

Our class website is:

http://mywebspace.quinnipiac.edu/jbwarren/200

A shortcut to the site is: <a href="http://bit.ly/gdd-200">http://bit.ly/gdd-200</a>. Students must post assignments to their website on mywebspace. Please create a folder for the class named 200.

**SOFTWARE** 

We will be using Unity to create games. You can find Unity here: <a href="https://unity3d.com/get-unity/download">https://unity3d.com/get-unity/download</a>. You may also complete coursework working in the lab. Each workstation in the GDD Lab has all the software needed to complete required assignments.

**USER ACCOUNTS** 

A number of the software programs we use will require you to create a personal user account. Please use your Quinnipiac email and usernames when signing up. For example, if your name is John Smith Doe, please sign up with the following credentials:

Name: John Doe Username: jsdoe Email: John.Doe@quinnipiac.edu

It is recommended that you use your QU password as well. Be sure to keep your password in a safe place.

**GDD STORAGE** 

GDD is a program in which you will be generating a great deal of digital content. Safe storage of this material is essential to your success in the GDD program. We recommend using One Drive, accessible through your Outlook email account, but it is essential that you also have your own external drive in which you keep current and backup files for all of your work. Do not leave materials on the hard drives of the machines in the lab as these machines can crash or have the drives wiped unpredictably. As professionals in this field we expect you to understand that lost or damaged files are not an excuse for missing or late work. Backup your work and archive it regularly.

STUDENT WORK

GDD keeps an archive of student work which may be displayed on the program website and used to publicize and promote our students and our program. At the end of each semester, you are responsible for turning in your completed projects with all associated code and media, to your professor. For your final project, you should also turn in a video of gameplay. Make sure all media is accurately credited. You should also have a website that GDD will link to from the student page of the GDD site that provides links to your bio and completed projects.

**LAB RULES** 

No eating in the lab. No cellphone use during class time. No working on projects, browsing the web or watching YouTube while other students are making presentations or during class discussions. This is extremely disrespectful towards your classmates and will negatively impact your grade.

**SCHEDULE** 

WEEK 1 – Intros, Course Structure

WEEK 2 – Module 1: Unity, Game objects, Scripts, Conditionals WEEK 3 – Module 1: Unity, Game objects, Scripts, Conditionals WEEK 4 – Module 2: Scenes, Input, Vectors, Physics, Collisions WEEK 5 – Module 2: Scenes, Input, Vectors, Physics, Collisions WEEK 6 – Module 3: Prefabs, Instantiate, Loops, Randomness WEEK 7 – Module 3: Prefabs, Instantiate, Loops, Randomness

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WEEK 9 – Module 4: Animation, Timeline, Properties

WEEK 10 – Module 5: Creating user interfaces WEEK 11 – Module 5: Creating user interfaces

WEEK 12 – Module 6: 3d basics WEEK 13 – Module 6: 3d basics

WEEK 14 – Final Project

FINAL EXAM – Final Project Presentations

**FINAL** 

We will meet during the scheduled exam period for final project presentations. Attendance is required, so make your travel plans accordingly.

**GRADE BREAKDOWN** 

40% Individual Projects

20% Quizzes
20% Exercises
10% Final Project
10% Professionalism

**GRADING RUBRIC** 

# Exercise grades will use the following scale:

100(A) You completed the assignment as intended.

60(D) You posted your lab before the due date, but missed its objectives.

O(F) You didn't post your lab before the due date.

# Individual project and final grades will use the following scale:

Excellent work. You went above and beyond the assignment. Professional quality.

95(A) Excellent work. You demonstrate deep engagement with the subject matter.

90(A-) Great work. You demonstrate mastery of the subject matter.

85(B) Very good work. You demonstrate basic mastery of the subject matter.

80(B-) Good work. You understand the subject matter and demonstrate

proficiency. The work is solid, but not original or creative.

75(C) Satisfactory work. You work shows understanding of basic concepts

but has occasional lapses.

70(C-) Poor work. Barely adequate. Shows major gaps in understanding.

60(D) Unsatisfactory. Does not satisfy the learning requirements.

O(F) You didn't hand in your work before the due date.

## \*Professionalism Grades:

Your professionalism grade will use the Quinnipiac Grading Scale below and be based on your conduct in class, participation, general engagement, respect for the learning environment and respect for your classmates and your teammates. If do not contribute, watch YouTube videos during critique, or are regularly disrespectful of your teammates do not expect a passing grade. You will lose two points from this grade if you have your phone out during class discussion.

## **CHECKING GRADES**

It is your responsibility to keep track of your grades throughout the semester. Grades will be posted on Blackboard and may be checked at any time. If you are not doing as well as you would like to be, you can meet with me to discuss extra credit projects BEFORE the semester ends. If you feel that I have made a mistake recording a grade or failed to enter a grade that you earned correctly, please email me so that I can correct it. Do not contact me just because you want a higher grade on a graded assignment.

#### **GRADING SCALE**

Your final letter grade is based on the Quinnipiac Grading Scale as follows:

A 93-100	B+ 87-89	B-80-82	C 73-76	D 60-69
A- 90-92	B 83-86	C+ 77-79	C-70-72	F 0-59

NOTE: A grade of C- or better is required in all game design and development courses and prerequisites. Students with a GPA of less than 2.0 will be put on probation. After two semesters on probation, students will be advised to change majors.

# **PLAGIARISM**

All the work you do for class must be your own unless you cite it. Clearly provide links to any code, art, music, or sound you use to complete assignments. This is especially important regarding the use of tutorials and using other people's code. If you use a tutorial from the web that includes code, I expect you to be able to explain how each line of code works, notify me that you are using a tutorial, and provide a link to that tutorial. If you fail to cite your sources, it will be assumed that you are trying to pass off the work as your own and it will be considered plagiarism. This will result in a zero on the assignment, notifying the Academic Integrity Board and a permanent record in your file. See below for more information about Quinnipiac's Academic Integrity policy.

## **ACADEMIC INTEGRITY**

At Quinnipiac, our community has chosen integrity as one of its guiding principles. Our academic integrity policy is based on the five fundamental values outlined by the Center for Academic Integrity: honesty, trust, responsibility, fairness and respect. "Double Dipping" (Multiple Uses of the Same Work) or

presenting the same or substantially the same written work (or portion thereof) as part of the course requirement for more than one project or course, requires the express prior written permission of the instructor(s) involved. Any violation will be dealt with according to the Integrity policy, which can be found at:

 $\frac{https://myq.quinnipiac.edu/Academics/Academic\%20Integrity/Pages/default.}{aspx}$ 

STUDENT HANDBOOK

The Quinnipiac University Student Handbook is intended to serve as a source of information on the many services, activities and policies of Quinnipiac. The handbook can be found at:

http://www.quinnipiac.edu/student-experience/health-and-safety/student-handbook/

**VPA ABSENCE POLICY** 

You are expected to be in class ready to work at the beginning of the scheduled class time. PROMPT ARRIVAL TO CLASS IS EXPECTED. Three late arrivals to class will equal one absence. PLEASE NOTE: IF YOU HAVE 6 OR MORE ABSENCES YOU MAY BE ASKED TO WITHDRAW FROM THE COURSE. 7 ABSENCES DURING THE SEMESTER WILL RESULT IN A FAILING GRADE. Attendance for the last class meeting scheduled during Finals Week is required. In the case of extenuating circumstances, such as an ongoing illness or the death of a loved one, the professor should be consulted as soon as possible, and documentation from the Student Affairs office may be required. In such circumstances the faculty and student can negotiate the possibility of granting an "Incomplete." In the rare cases where a student is allowed to take an "Incomplete" as the result of extenuating circumstances, the student must follow the guidelines and timelines stipulated in the University catalog.

**VPA LATE WORK POLICY** 

The assignments for this class must be turned in complete and on-time. NO LATE WORK IS ACCEPTED. If you have a medical or family emergency which will prevent you from getting your work done, it is your obligation to notify the professor of this fact and provide him/her with the appropriate documentation BEFORE the due date of the assignment. If your work is not turned in on time and you have not provided an excuse prior to the due date, do NOT email the professor with justifications. You will simply not receive credit for the assignment.

INCLUSION STATEMENT

GDD is committed to maintaining an environment in which all members are treated equitably, feel fairly represented, and are comfortable discussing topics, particularly controversial ones, with civility and open-mindedness. We are working to build a community of diverse individuals who can celebrate our differences while building on what we have in common. Game design is a creative practice, so we encourage wide-ranging explorations of what is possible while respecting practices that work toward the greater good. We ask all members of the community to think about the work they are producing and ask themselves

if they are consciously or unconsciously reproducing or reinforcing stereotypes, bias, or other elements that reinforce systemic racism, sexism, bigotry or other inequalities. Games can change the world; let's make sure we are changing it in a positive way.

# **POLICY ON DISABILITIES**

Quinnipiac University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me.

If you have a disability, or think you may have a disability, you may also want to meet with the Office of Student Accessibility, to begin this conversation or to request reasonable accommodations. Quinnipiac University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973.

Please contact the Office of Student Accessibility by emailing access@ qu.edu, or by calling (203) 582 – 7600. If you have already been approved for accommodations through the Office of Student Accessibility, please meet with me so we can develop an implementation plan together.

## **LEARNING COMMONS**

The Learning Commons is a place for students to go when they want to achieve a level of performance they can't reach on their own. In a setting of practice and growth, student resources are provided through Peer Educator programs, the Office of Student Accessibility, and Academic Development & Outreach professional staff. The Learning Commons can be found at the Mount Carmel Campus in the North wing of the Arnold Bernhard Library; and at the North Haven Campus on the third floor of the Law School (SLE-340). Students are encouraged to visit The Learning Commons for support with class content, to improve study skills, to consult on academic success strategies, and for general developmental advising needs.

Phone: 203-582-8628

Email: LearningCommons@Quinnipiac.edu

Website: <a href="https://www.qu.edu/student-resources/academic-support.html">https://www.qu.edu/student-resources/academic-support.html</a>