

GDD 200: Intro to Game Development

COURSE INFO	<p>GDD 200 Spring 2022 Tuesday - Thursday, 12:30 pm - 1:45 pm Tator Hall, Room 129 http://mywebspacespace.quinnipiac.edu/jbwarren/200</p>
INSTRUCTOR INFO	<p>Jonah Warren jonah.warren@quinnipiac.edu 203.582.7921 CAS I 316</p>
OFFICE HOURS	<p>My office hours are: Thursday, 2 PM - 4 PM</p> <p>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.</p>
DESCRIPTION	<p>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.</p>
LEARNING OUTCOMES	<p>Students in GDD 200 will:</p> <ul style="list-style-type: none">• 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	<p>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.</p>
STRUCTURE	<p>The class will be divided into five 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</p>

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: <http://bit.ly/gdd-200>. 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: <http://unity3d.com/unity/download>. You may also complete coursework working in the lab. Each workstation in the GDD Lab has all the software needed to complete required assignments.

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

Masks on at all times. 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
WEEK 8 – Module 4: Animation, Timeline, Properties
WEEK 9 – Module 4: Animation, Timeline, Properties
WEEK 10 – Module 5: Creating user interfaces
WEEK 11 – Module 5: Creating user interfaces
WEEK 12 – Final Project
WEEK 13 – Final Project

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 Your total grade will be calculated as follows:

- 400 Projects (5 × 80pts each)
- 200 Quizzes (5 × 40pts each)
- 225 Exercises (15 × 15pts each)
- 120 Final Project
- 100 Professionalism

GRADING RUBRICS Each grade you get will be broken down into categories. Each of those categories will be evaluated using the following metrics: Exceeds Expectations (100%), Meets Expectations (85%), Approaches Expectations (65%), Does Not Meet Expectations (40%), or Not Attempted (0%). The rubric for each assignment can be found on Blackboard. Here’s an example rubric for projects:

	Does Not Meet Expectations (40%)	Approaches Expectations (65%)	Meets Expectations (85%)	Exceeds Expectations (100%)
Creativity (20%)	Feels like a copy of an existing game.	Close to an existing game. Potentially entails small alterations that aren’t meaningfully significant.	Combining existing ideas effectively. Feels like its own experience.	Unique and different. Combining ideas in new and interesting ways, resulting in unanticipated opportunities.
Implementation (20%)	There are game breaking bugs.	Although playable, there are bugs and/or implementation issues that significantly interfere with the experience.	No major bugs. Functions as intended.	A bug-free, seamless experience. Uncommon/incorrect user actions are handled gracefully. Well-written, flexible code.
Experience (40%)	A repetitive, tedious, or unintentionally confusing experience.	Has moments which keep the player’s attention, but fails to do so for an extended period of time. Possible usability, level design, and/or progression issues.	A nicely designed, engaging experience. The player is incentivized to continue playing. Good in-game player feedback.	Provides a very engaging experience through thoughtful, well-designed gameplay and feedback. Keeps the player’s attention by providing increasingly interesting challenges and/or choices.

Professionalism (20%)	Hastily-made, sloppy work.	Looking for more attention and care. Inconsistent and unprofessional.	Good attention to detail. No cut off UI, blurry text, or sloppy, uncommented code.	Exceptional attention to detail. All screens are well-designed, code is well-written and commented, and its design consistent and considered.
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Here is an example grade, worth 80pts:

Creativity (20%) × Meets Expectations (85%) × 80 = 13.6pts
 Implementation (20%) × Approaches Expectations (65%) × 80 = 10.4pts
 Experience (40%) × Meets Expectations (85%) × 80 = 27.2pts
 Professionalism (20%) × Approaches Expectations (65%) × 80 = 10.4pts

 61.6pts (77%)

***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:
- <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: <https://www.qu.edu/student-resources/academic-support.html>