GDD 210: Game Lab 1 –Game Production Pipeline and Prototyping, Teamwork, Unity
COURSE INFO GDD 210

Fall 2019
Monday/Wednesday 9:00 AM - 10:15 AM (Section 1 – Professor Bertozzi)
Tuesday/Thursday 2:00-3:15 (Section 2 – Professor Blake)
Tator Hall, Room 129
http://mywebspace.quinnipiac.edu/egbertozzi/210
http://mywebspace.quinnipiac.edu/cblake/210

INSTRUCTOR INFO

Elena Bertozzi, elena.bertozzi@quinnipiac.edu 203.582.7998
Christopher Blake, Christopher.blake@qu.edu

OFFICE HOURS

Bertozzi: M/W 1-2 Blake: T/Th 1-2 or by appointment.
We are 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 answered by the beginning of the following week.

DESCRIPTION

Game Lab I is the first of a two-course sequence focusing on game production and prototyping. In Game Lab I, students work in teams to define and develop a game concept, research content, develop the game mechanics and game play, build game assets and working prototypes. Students will also start learning how to use GitHub

OBJECTIVES
Students in GDD 210 will learn:
- How to make games using Unity and C# and GitHub
- About the process of making games: iterative design, playtesting, and analysis;
- How to present game ideas clearly, critically evaluate games, and give clear feedback;
- How to work in small teams.

PHILOSOPHY
Predicting the behavior of complex systems like games is difficult. The only way to know whether or not an idea will make for a meaningful game experience is by building it. This also means that creating a successful game on the first attempt is close to impossible. Because of

this, we will focus on the process of iteration: we'll build prototypes, test them and build them again. Mistakes and incorrect assumptions are to be embraced as part of the process. Students must post all assignments to their website on mywebspace. Your first assignment will include setting up your website. Please create a folder for the class named 210 where you will put links to your work.

STRUCTURE
In the beginning of the semester we will focus on methodically improving your game development skills in Unity. During the first six weeks, class will consist of tutorials demonstrating how to build simple games from scratch in C#. Each tutorial will be completed individually and built upon with assignments that will ask you to take what we learned in class and modify it creatively. We will also be reinforcing your coding skills during this period and assessing progress with quizzes.

After these foundations are established, the class will turn into a more traditional design lab, where class time will be dedicated to working on two larger game assignments working in teams. These larger projects will consist of presentations, design documents, playtesting, critique and in-class labs.

WEBSITES
Class websites:

http://mywebspace.quinnipiac.edu/egbertozzi/210
http://mywebspace.quinnipiac.edu/cblake/210

TEAMS
For the larger game projects, students will be working in teams of two. Most students will most likely take on more than one role. Roles may include: programmer, artist, game designer, interface designer, usability tester and sound designer.

SOFTWARE
We will be using Unity to create games. Please download the free version and install it on your personal computer if you haven't. You can find it here: https://store.unity.com/download?ref=personal You may also complete coursework working in the lab. Each workstation in the GDD Lab has all the software needed to complete required assignments. You will be using GitHub for your code.

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

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

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.

You should use your allocated space on OneDrive where you can store your materials, 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.

You should make a class folder on OneDrive and share it with the professor.

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 (on OneDrive) your completed projects in playable form, with all associated code and media, to your professor. You should also turn in a video of gameplay. Make sure you and any other sources are accurately credited in these materials. 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 extremely disrespectful towards your classmates and will negatively impact your grade.

SCHEDULE

WEEK 1 – Intros, Creativity and Inspiration. Create Trello, website for turning in your work, and learn how to upload files to game server. Discussion of GitHub
WEEK 2 – Lab1due: Unity's UI, Game Objects, Movement with math. Quiz 1
WEEK 3 – start Lab2: Functions, Collisions, Responding to Input
WEEK 4 – Lab 2 due, Quiz 2 - Start Lab 3
WEEK 5 – Lab3: Mouse Position, Physics, Prefabs –
WEEK 6 – Quiz 3; work on Lab 4;
WEEK 7 – Lab 4 due, Individual Games start;
WEEK 8 – Project 1: Individual Game due and Project 1: Research + Game Idea
WEEK 9 – Project 1: 1Game Design Document + Prototype Development
WEEK 10 – Project 1: Playtest + Iterate + Critique
WEEK 11 – Project 1: Project Presentations; Quiz 4

WEEK 12 – Project 2: Research + Game Idea Presentations
WEEK 13 Project 2: Game Design Document + Prototype Development
WEEK 14– Project 2: Iterate+ Playtest + Critique
FINAL EXAM – Project 2: Project Presentations

TRELLO:
Design Doc – Part 1- define the goal and the target audience
Creative phase ---- Brainstorm ideas : define the mechanics, art, challenges (for the designer and for the player).
Critical Phase (editing down ideas to what you can actually build). What will the player have to learn to excel at the game? How will the feedback you give motivate the player/
Design Doc – Part 2 – Flowchart, explain the mechanic and why it will be fun for the player, examples of art style (mood board), paper prototype
Building Phase: Execute your design to the best of your ability
Assessment Phase: document how long it takes to execute tasks so that you can accurately scope how much you can accomplish in the time available. Refine this over the course of the semester. Assess how well the game works, usability for the player, whether or not it's fun and how to make it more so.
Design Doc – Part 3 - Post mortem Analyze what went well, what went wrong and how to revise process for the future. Usability and playtesting results.

GRADING RUBRIC

20% Labs (50 points each x 4 = 200pts)
20% Quizzes (50 points each x 4 = 200pts)
10% Individual Game
22% Project 1
80% Individual Process Grade (presentation, document, and weekly grades)
20% Game Grade
22% Project 2
80% Individual Process Grade (presentation, document, and weekly grades)
20% Game Grade
6% Professionalism

If you do not show up for your final presentation for a group project without notifying me prior, you will fail the project. This often means failing the class.

Labs will be graded on the following scale:
100(A)You went above and beyond the assignment, demonstrating deep engagement with the subject matter.
85(B) You completed the assignment and posted it before the due date.
60(D) You posted your lab before the due date, but didn't complete the assignment.

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

All assignment and project grades will use the following scale:

100(A)
Excellent work. You went above and beyond the assignment, demonstrating deep engagement with the subject matter.
Professional quality.
89(B+)Great work. You demonstrate basic mastery of the subject matter.
82(B-) Good work. You understand the subject matter and demonstrate proficiency. The work is solid, but not original or creative.
76(C) Satisfactory work. Your work shows understanding of basic concepts but has occasional lapses.
69(D) Poor work. Barely adequate. Shows major gaps in understanding.
59(F) Unsatisfactory. Does not satisfy the learning requirement

Nothing. You didn't hand in or show your work before the due date
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.

ACADEMIC INTEGRITY

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 used to complete assignments. This is especially important regarding the use of tutorials. 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 do not do this or 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
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 here. 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 here.

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 C- or better is required in all departmental prerequisites.

VPA ATTENDANCE 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.

There is no distinction between "excused" or "unexcused" absences - missed course work, content and class participation are an issue in any absence and can negatively impact the rest of the class members. 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.

POLICY ON DISABILITIES

Students with disabilities who wish to request reasonable accommodations should contact the Office of Student Accessibility in Arnold Bernhard Library north wing at (203) 582-7600 or North Haven at SLE 340 (203)-582-7600 (access@quinnnipiac.edu). Quinnipiac University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act.

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/

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