Eugenio María de Hostos Community College - Humanities Dept.

GD201 – Digital Games
Code #_____; Section:_____; Semester / Year; Professor _____
Meets: _____
Email: _____
Office: _____
Hours: _____

Course description:

This course introduces students to the concepts of game mechanics, game theory and digital game production by affording them the opportunity to read about games and game development, play test several different video games, and finally to create their own game using important development tools. The course explores the effect of gaming on entertainment, learning, and even business by analyzing how games can be more critically discussed. In this way, students learn to be better developers through building skills in critical thinking, analysis, game design, and communication. On a deeper level, the course works to find ways to address fundamental misunderstandings by the general public that the form is entirely represented by games with a violent subject matter.

Prerequisite: **GD101 Intro to Games**
Prerequisite/Co-requisite: **GD105 Game Programming I, GD110 Visual Design for Games**

Course objectives:
By the end of the course, students will have learned:

- An introduction to game theory
- A brief History of games
- The principles of user testing
- Better methods of iterative design
- Methodologies for designing interaction
- How to develop and write a rule set

Credit Hours: 3 hours

Required readings:

- Poole, Steven. **Trigger Happy: Videogames and the Entertainment Revolution**
- Wolfe, Mark J. P.. **The Medium of the Video Game**
- Koster, Raph. **A Theory of Fun for Game Design**
- Rogers, Scott. **Level Up! The Guide to Great Video Game Design**
- Hunicke, LeBlanc, Zubek. **MDA: A Formal Approach to Game Design and Game Research**

Expected: While this class has not been designated as 'web-enhanced,' it is expected that students wishing to take full advantage of the class have:

- Familiarity with the Internet;
- Access to the Internet from home or elsewhere
- An active Hostos email account, which they check daily.

Due dates:
Late assignments will not be accepted without a note from a physician or counselor.

Grading:

Reviews	5
Projects	85
Participation	10
Total	**100**

Grades:

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

There is no R grade in this course.

Digital Games (DG) assignments:

This is a studio course involving a combination of lecture, project activities, and discussion of assigned readings. Staying on top of the reading assignments is essential in order to be informed and make contributions during in-class discussions and activities. These readings will reference and introduce concepts and vocabulary that may at times be unfamiliar and so require students to do independent research. This will be expected.

10% of the grade will be based on engagement and consistent attendance. The balance of the grade will be determined by several projects undertaken over the 15 week course.

Assignment	Due	Points
Roll-a-ball		2
Rube Goldberg Machine	2	4
Reading/Game Response	4	8
Core Pitch & GDD Update		6
Core Progress Report & GDD Update		2
Core Playground Level & GDD Update		5
Core Mechanics Finished & GDD Update		5
Core Game Loop & GDD Update		5
Core Final Presentation & GDD Turn In		15
Level Pitches		6
Level Mechanics Finished		5
Levels Implemented		5
Levels Polished		5
Levels Final Presentation		17
Attendance & Participation	-	10
Total		100

Notes on the grading criteria:
Work will be evaluated according to the following criteria:

- Understanding and interpretation of readings
- Research and Analysis of related issues
- Contribution to in-class discussion
- Originality of work
- Creative problem solving

The assignments:
What follows are brief descriptions of the course assignments students will be doing over the course of the term. Detailed instructions will be provided in-class. Written assignments are to be posted to the class blog no later than 30 minutes prior to the start of class. Without a physician or counselor's note, late assignments will not be accepted and so will receive a grade of 0.

Reading and Game Response Papers (RGR)
Students will be assigned readings and games to play that illustrate both the history and the mechanics of our topic. Students will then write 200-500 word response papers analyzing the games played through the lens of the associated week's readings. Four papers are due at specified times throughout the semester, and may focus on the readings and games of any week prior to its due date. They should be completed and posted to the class blog in the form of a PDF upload. Games are assigned as collections from which students may choose what to play. These collections are outlined on the class website.

Game Projects
Over the course of the semester, students will work on two halves of two separate game projects, working first on the core mechanics, followed by polish and level design. Every team is expected to give varying levels of presentation each week, as well as post an updated copy of their game's GDD in PDF form.

Presenting:
Beginning in week 5, student teams are expected to present every week. There are three different presentation types, depending on the stage the project is at. Pitch presentations are due the first week a project is expected to be presented, followed by Update presentations every week after until the project is due, at which point students are expected to give a Final presentation.

Pitch Presentation
These are meant to communicate to the instructor and the class the team's intention for their project. It should detail the intended work, its division among all members of the team, and the end-user experience it is meant to provide. Presentations should be supported by visuals wherever possible, and be no longer than four minutes in length.

Update Presentation
Updates should be short, to the point, and representative of all important project work conducted since the class's last meeting. Objectives should be-restated, to provide context for the week's accomplishments, as should the results of any conducted playtests. In addition, as soon as the team has a working prototype, that prototype should be available to play in class.

Final Presentation
At the end of a project, all teams are expected to make a final presentation, detailing the final product and contrasting the end result with their initial
objectives. Specific expectations and requirements will shift between projects, to be announced in class and on the class website.

Documentation:
Students will be expected to keep full documentation of their game projects, and should post regular updates of their documentation to the class blog in the form of a PDF. **This documentation counts for one third of the presentation grade, and one point per week.** It should follow GDD standards set up in previous classes, while also being comprehensive enough to (in the case of the game core) allow a smooth on-boarding experience for the next design team. More detail to be given in class and on the class website.

The two game projects will be as follows:

Project 1: Game Core
Forming a team of 2-3 students, develop a game core in Unity. Begin by conceiving of either a new core game mechanic, or an unusual use of an existing one. Develop all of the relevant pieces together into a full game loop with one test (or "playground") level, and polish the feel and interactions of the game.

Project 2: Level Design
Forming a team of 3-5 students, choose one of the Project 1 game cores. Develop a set of levels for that game core. These levels should teach the game, introduce a few new mechanics, and provide a sense of progression for the player.

Participation:
A student's participation grade is based primarily on their attendance and participation in class. Every student begins the term with 10 participation points. Attendance is mandatory for every single scheduled class. For each class missed, 3 participation points will be deducted. Tardy students will have 1 participation points deducted. More than three absences amounts to a failure, as a student may not earn less than 0 participation points.

Academic policies (from Catalogue):
Hostos Community College believes that developing student's abilities to think through issues and problems by themselves is central to the educational process. Since the Hostos College degree signifies that the student knows the material s/he has studied, and the practice of academic dishonesty results in grades or scores that do not reflect how much or how well the student has learned, understood, or mastered the material, the College will investigate any form of academic dishonesty brought to its attention. If the charge of academic dishonesty is proved, the College will impose sanctions. The three most common forms of academic dishonesty are cheating, plagiarism, and bribery.

Cheating (from Catalogue):
In the collegiate setting, cheating is defined as the purposeful misrepresentation of another's work as one's own. Faculty and students alike are responsible for upholding the integrity of this institution by not participating either directly or indirectly in act of cheating and by discouraging others from doing so.

Plagiarism (from Catalogue):
Plagiarism is a form of cheating which occurs when persons, even if unintentionally, fail

to acknowledge appropriately the sources for the ideas, language, concepts, inventions, etc. referred to in their own work. Thus, any attempt to claim another's intellectual or artistic work as one's own constitutes an act of plagiarism.

Bribery (from Catalogue):
In the collegiate setting, bribery involves the offering, promising, or giving of items of value, such as money or gifts, to a person in a position of authority, such as a teacher, administrator, or staff member, so as to influence his/her judgment or conduct in favor of the student. The offering of sexual favors in exchange for a grade, test score, or other academic favor, shall be considered attempted bribery. The matter of sexual favors, either requested or offered, in exchange for a grade, test score or other academic favor, shall also be handled as per the Sexual Harassment procedures of the College.

College attendance policy (from Catalogue):
Students are expected to attend all class meetings in the courses for which they are registered. Classes begin at the times indicated in the official schedule of classes. Arrival in class after the scheduled starting time constitutes lateness.
The maximum number of absences is limited to 15% of the number of scheduled class hours per semester and a student absent more than the indicated 15% is deemed excessively absent. Attendance is monitored from the first official day of classes. In the case of excessive absences or lateness, the instructor has the right to lower the grade, assign a failing grade, or assign additional written work or readings.
Absences due to late registration, change of program, or extenuating circumstances will be considered on an individual basis by the instructor. Each department and program may specify in writing a different attendance policy. Instructors are required to keep an official record of student attendance and inform each class of the College's or department attendance policy.
NOTE:

- Any work missed during any period of absence must be made up by the student.
- To meet financial aid criteria, a student must attend class at least once in the first three weeks and once in either the fourth or fifth week of class.

Course schedule:
Readings must be completed for each class. Not all assigned texts will be discussed in class or covered in the class lectures.

CLASS	Topic / In-Class Activities	Due	Read for Today
1	Class introduction: Blog / Discord Discussion: Digital vs analog Introduction to Unity	—	—
2	Unity: Physics, interaction, and triggers Discussion: History, Genre, and Physical Context	**Roll-a-ball** Play 3 Classic games install Unity	**Trigger Happy** Ch 2, pp 15-44
3	Show off Rube Goldberg Progress Discussion: Narrative and Interactivity Discussion: What does it mean to be a game?	Play 2 Narrative games	**The Medium of the Video Game** Ch 5, pp 93-111
4	Present and Play with toys! Discussion: Mechanics, Verbs, and Nouns Brainstorm/Pitch Workshop Team Formation Discussion: Agile Development	**Rube Goldberg Machine** Play 2 Interesting Mechanics games **RGR #1 Due**	**A Theory of Fun**, Ch 2 & 3, pp 12-48

5	Game Core Pitches	**Game Core Pitch & Progress Report** Play 2 un-played Classic, Narrative, or Mechanics games	**Level Up!** Ch 12, pp 353-379
6	Discussion: Mechanics, Dynamics and Aesthetics Unity Workshop	**Present Progress** Play 2 un-played Classic, Narrative, or Mechanics games **RGR #2 Due**	**MDA** (all)
7	Discussion: Procedural Generation Unity Workshop	**Present Playground Level** Play 2 Procedural games	read about at least two topics on: **pcg.wikidot.com**
8	Discussion: Ethics of Game Design Unity Workshop	**Basic Mechanics Finished** Play 1 Serious Game **RGR #3 Due**	**A Theory of Fun**, Ch 10
9	Discussion: Game Feel and Polish Unity Workshop	**Demonstrate Full Game Loop** Play 1 un-played game from any category	Watch: "**Juice it or Lose it"** & **"The Art of Screen Shake"**
10	Game Core Presentations Discussion: What is Level Design? Level Design Team Formation Discussion: How to pitch a level	**Core Final Presentations** Play 2 Level Examples	**Level Up!** Ch 9, pp 209-255
11	Level Pitches Discussion: Level Design in Detail	**Level Pitches** **RGR #4 Due**	
12	Unity Workshop	**New Mechanics Done**	
13	Unity Workshop	**Levels Implemented**	
14	Unity Workshop	**Levels Polished**	
15	Final Presentations	**Final Presentations**	