

GAME 3800: Game Concept Development and Production

Fall 2014

Northeastern University

Instructor:

Dr. Joshua B. Gross

Office: 137 Meserve

Phone: 617-373-6058 (no voicemail; please email me)

Email: j.gross@neu.edu

Office hours: 11:45AM-1:15PM Monday and by appointment (prefer appt)

Not on Sept 8 or Nov 10

By appt. in office, via phone, via skype. Can be in evening. Let me know your schedule.

Class:

11:45AM-1:25PM Tuesday

2:50PM-4:30PM Thursday

324 Ryder

Course Aims and Objectives:

The course will focus on the game design and development cycle and process. It will involve students in the process of developing two games: normally, a 2D and a 3D game. The course will consist of two hybrid lectures/labs where students will see (and give) presentations, see (and give) tutorials, have discussions, and have time to work on their projects and get feedback from the instructor and others.

Course Description:

This course is heavily project driven and studio-oriented. Students will form into teams of 3-4 and collaborate to design two games of their choice - typically one in 2D developed during the first half of the semester, and the other 3D developed during the second half of the course. These two development cycles will be accelerated and will allow students to experience different team dynamics, project management styles, and processes. Each development cycle will have the following milestones:

1. Game pitch
2. High Level Design (HLD) Doc
3. Prototype 1
4. Prototype 2

All prototypes and releases will be submitted along with a testing report discussing the success or failures of the prototypes.

Course Learning Objectives:

Students who take the class should learn:

- How to iterate and refine to develop a complete game
- How to balance a game design using user feedback in the process
- Team management
- Process management
- Prototyping

Course Requirements:

1. **Class attendance and participation policy:** Students are expected to attend and participate in all labs. Attendance will be taken, missing one lab will severely affect the grade, as shown below.
2. **Deliverables:** All deliverables are to be handed in by the indicated time and date; however, each

group will determine the date on which they will deliver the assignment. No late submissions will be accepted. All deliverables will be turned in electronically by the time posted on the course website.

- 3. Required Materials:** All required reading materials will be photocopied and distributed in class. It is mandatory to read the required materials before class.

Course Evaluation and Grading:

Attendance & Class Participation 20%

Team Form 20% (*handed in at the end of every lab*)

Game Project 1 30%

Game Pitch	5%
HLD Doc	5%
Prototype 1	10%
Prototype 2	10%

Game Project 2 30%

Game Pitch	5%
HLD Doc	5%
Prototype 1	10%
Prototype 2	10%

Team Form: after every lab, each student will be required to fill in an online team Weekly Activity Report (WAR). The WARs will be submitted through the Journal tool on Blackboard. A WAR is a short record in which each team member submits the following information:

- Name
- Team name
- Role in team
- Accomplished tasks this week
- Goals for next week

WARs should take 5-10 minutes to complete.

Game Project: Each game project will be developed by a group of 3-4 students, with different backgrounds, interests, skills, and goals. The project will include four deliverables:

- **Game Pitch**: The game pitch is a presentation delivered in class by the group. It is restricted to 10 minutes. The presentation should abide by the presentation template and guidelines, which will be distributed to all teams two weeks before the pitch is due.
- **High Level Design Document**: all teams will be required to submit their HLD doc and also present it in class. The document should adhere to template that will be distributed in class. The document should include prioritization of game mechanics as well as a tested prototype (could be a paper prototype).
- **Prototype 1**: all teams will be required to deliver a presentation of their prototype 1 version of the game. The presentation should consist of a playable demo of the game. For each game the group will also need to submit a testing report discussing the testing method used and the results of testing it with at least 3 other groups of users.
- **Prototype 2**: all teams will be required to deliver a presentation of their prototype 2 version of the game. The presentation should consist of a playable demo of the game. For each game the group will also need to submit a testing report discussing the testing method used and the results of testing it with at least 3 other groups of users.

Attendance: attendance is required, since this is a group project. Teams are expected to work together within the lab session.

Software and Tools:

- Team Forums
 - On sites team select; can be on Blackboard
- Project Management Sites and tools
 - Dropbox, Google Drive, git/GitHub (or other version control repository)
- Game Engines:
 - Game Maker
 - Unity

Grades:

All coursework will be scored and normalized on a scale of 0-100, which will then be converted to a letter grade. Grade totals will be rounded, so a 92.51 is an A, while a 92.49 is an A-.

Score	Grade
93-100	A
90-92	A-
87-89	B+
83-86	B
80-82	B-
77-79	C+
75-77	C
72-74	C-
70-71	D+
66-69	D
64-65	D-
0-63	F

Deliverables Blocks:

Each session students are required to submit a team work form online.

The course has four deliverables per game. These deliverables are as follows:

There are no due dates to these deliverables. Teams must meet and create their own schedules. However, note that the deliverable must meet approval before they are presented and it is only after

presentation of the materials the groups can move towards the next deliverable.

- Game Pitch (doc + presentation)
- HLD
- Prototype 1 and testing report
- Prototype 2 and testing report

Each of these deliverables will be assessed as follows:

- Instructors approval: first all deliverables should gain instructors approval before a formal presentation of the materials will be scheduled. If deliverables do not meet instructors approval the team cannot progress to the next deliverable till they revise and meet approval. This means that the instructor should receive a copy of the deliverable 2 days before presentation. Edits and tweaks are fine.
- Presentation: once approved the teams will formally present the materials in front of the class. They will be critiqued on their presentation. They will also receive a grade and asked to make improvements for their next deliverables.

Course Blocks:

The course will be delivered in terms of Course blocks. These blocks will be scheduled in relation to team accomplishments and needs. The materials will be as follows:

- Industry Overview (jobs, pipeline, process, types of companies)
- Development Processes: software development processes and management
- Team Management and task dependency
- Risk Management
- Game Pitch introduction with Examples
- High-Level Design
- Prototyping
- Testing Protocols

Lab materials discussed:

- Brainstorming Methods
- Research Methods
- Project management tools
- Debugging and testing tools
- Game Engines: 2D: Game Maker and Flash, 3D: Unity

Student Survey

Every student is expected to fill out a TRACE (Teacher Rating and Course Evaluation) survey at the end of the course. These surveys are important to the university and the instructors in order to continually improve the quality of the course. Your participation is greatly appreciated.

Academic Integrity Policy

All students must adhere to school policy regarding academic integrity:

<http://www.northeastern.edu/osccr/academichonesty.html>

Northeastern University is committed to the principles of intellectual honesty and integrity. All

members of the Northeastern community are expected to maintain complete honesty in all academic work, presenting only that which is their own work on tests and assignments. If you have questions regarding the definitions of cheating or plagiarism, consult the Northeastern University Student Handbook and/or contact your professor prior to submitting work for evaluation.

Climate and Questions, Comments?

Always feel free to ask questions, offer comments, give feedback. However, there will be no tolerance for discrimination or disrespect toward others in the class. Any student having concerns is asked to speak directly with Joshua Gross.

Tentative Course Schedule (May change to accommodate guest presenters & student needs)

Week 1 Sept 4	Class overview Introductions Syllabus Readings Forming Teams Class Project
	Assignment: Proposal for Class Project
Week 2 Sep 9 & 11	Lecture: Industry Overview (jobs, pipeline, process, types of companies, roles) Lecture: Development Processes: software development pipelines and management Lecture: Project Milestones Lecture: Game Pitch introduction with Examples Lecture: Brainstorming Methods Workshop Pitches, vision statement, and scoping Working on Pitches and critique of current versions of pitches
	Overview: Project Management Tools: making Milestones and Management of teams (basecamp, rally, Sakai) Communication (Mingleverse, Mikogo, Skype (tinychat)) Code Management (Google Drive, Dropbox, Google Code/github, subversion/git) Time and group management (social network, IMs, Google Calendar)
	Materials: Presentation Pitch Templates Bioshock Pitch Document: http://www.scribd.com/doc/32211144/Bioshock-Pitch-Document
Week 3 Sep 16 & 18	High Level Design Document: prioritizing and prototyping
	Presentations: Game Pitches Suggested Due Date: Game Pitch Presentations (5%)
	Materials: HLD Design Doc Template

Week 4 Sep 23 & 25	Lecture: Testing Methods Working on Prototyping, testing and HLD development Presentations: Game HLD Doc Prototype 1 development Suggested Due Date: HLD Docs (5%)
Week 5 Sep 30 & Oct 2	Prototype 1 development
Week 6 Oct 7 & 9	Presentations: Prototype 1 Suggested Due Date: Prototype 1 and Testing Report (10%) Working on Prototype 2
Week 7 Oct 14 & 16	Prototype 2 development
Week 8 Oct 21 & 23	Presentations: Prototype 2 Suggested Due Date: Prototype 2 and Testing Report (10%) Working on Pitch for Game 2
Week 9 Oct 28 & 30	Workshop Pitches, vision statement, and scoping Presentations: Game Pitches Suggested Due Date: Game Pitch Presentations (5%)
Week 10 Nov 4 & 6	High Level Design Document: prioritizing and prototyping
Week 11 Nov 13	Working on Prototyping, testing and HLD development
Week 12 Nov 18 & 20	Presentations: Game HLD Doc Suggested Due Date: HLD Docs (5%)
Week 13 Nov 25	Prototype 1 development Suggested Due Date: Prototype 1 and Testing Report (10%)
Week 14 Dec 2	Presentations: Prototype 2 Suggested Due Date: Prototype 2 Presentation Videos and Testing Report (10%)
Week 15 Dec 9	Last day to turn in presentation videos and testing report