DM-UY 2153-A INTRO TO GAME DEVELOPMENT
CS-UY 3233-A   GAME DEVELOPMENT STUDIO 1

TuTh 12:30 – 2:20   2 Metrotech Center, Room 817   3 units, Spring 2015

INSTRUCTOR:
Robert Yang <ry14@nyu.edu>, office hours by appointment

DESCRIPTION:
This class introduces the principles of analog and digital game design. Students learn about a range of game types and understand their conceptual building blocks. Students complete a structured sequence of assignments toward the completion of game project(s).

LEARNING GOALS / OUTCOMES:
* Understand basic game design concepts, processes and terminology (analog games)
* Acquire a critical understanding of digital media (specifically, digital games)
* Develop competency in basic OO programming (in a game development context)
* Develop competency in industry-standard commercial software (Unity3D)

PRIMARY READINGS:
* Game Design Workshop, by Tracy Fullerton et al. (2008)
* various games that you will be expected to play for at least 30+ minutes
    ○ All games are freely available in the Game Library on the 8th floor! Use it!

MATERIALS / TOOLS: (for 2nd half of semester)
* (preferably) a laptop computer of some sort... the lab workstations aren't very usable
* Unity, free version – unity3d.com

ASSIGNMENTS:
* Weekly DESIGN EXERCISES... analog exercises are groups, digital exercises are individual
* Weekly JOURNALS about readings / play.
        - Write 150+ words (that's not a lot, tbh) in response to the weekly prompt.
        - You MUST quote any assigned readings at least twice, or you will lose credit.
* Turn-in homework at: **github.com/radiatoryang/poly_gamedev_spring2015**

* MIDTERM group project: nondigital 2 player track-based board game
* FINAL group project: a digital 2 player game based on another group's midterm prototype

COURSE STRUCTURE:
* Showing up is the most important part of class. You MUST attend Tuesday and Thursday.
* After two (2) unexcused absences, your grade will begin going down one grade level for every additional unexcused absence. (e.g. A > B)... Four (4) is grounds for failure.
* Tuesday is usually more structured LECTURE. Thursday is more self-directed LAB time.

THERE IS NO FINAL EXAM. Ignore the registar / final exam schedule for this class.

<u>SCHEDULE (* tentative, subject to change)</u>

1/27 WEEK 1: introductions, what is game design and game dev? class-mod Turtle Wushu
Homework: read + journal Fullerton ch. 1, play + mod + test Animal Upon Animal

2/3 WEEK 2: formal elements, types of rules, systems, play Go Fish! and Doom 1
Homework: read + journal Fullerton ch. 2, play Go, play + mod + test Checkers

2/10 WEEK 3: storytelling and pacing in games, story games, play Werewolf
Homework: read + journal Hunicke MDA paper, play Dixit, create emotion place game

2/17 WEEK 4: survey of track games, ideation processes <u>!!! BEGIN MIDTERM PROJECT !!!</u>
Homework: read + journal Fullerton ch. 6, group-design and bodystorm midterm

2/24 WEEK 5: intro to game studies, the magic circle, cheaters and spoil-sports
Homework: read + journal Rooie Rules, cheat / spoil a game, playtest midterms

3/3 WEEK 6: ******* (NO LECTURE OR LAB, AWAY AT GDC) *******
Homework: read + journal Fullerton ch. 9, do + document midterm project playtest

3/10 WEEK 7: scope, production, triage... <u>!!! MIDTERM PROJECTS DUE ON THURS !!!</u>
Homework: finish and demo and present midterm on Thursday

3/17 WEEK 8: ******* (NO LECTURE OR LAB, SPRING RECESS) *******
Homework: download + install Unity on your laptop, do diagnostic worksheets

3/24 WEEK 9: intro to Unity, working with 3D space and assets, exporting
Homework: read + journal Fullerton ch. 13, play Proteus, make a poetic landscape

3/31 WEEK 10: intro to Unity C# code, vector math, physics
Homework: read + journal Fullerton ch. 8, play Crayon Physics, make a Rube Goldberg

4/7 WEEK 11: more Unity C# code, make simple spaceship controller <u>!!! START FINAL !!!</u>
Homework: read + journal Fullerton ch. 7, play Hot Throttle, paper prototype final

4/14 WEEK 12: code a checkpoint / lap system, playtest paper prototypes, work on final
Homework: read + journal Fullerton ch. 11, play Papers Please, digital prototype final

4/21 WEEK 13: coding projectiles, playtest digital prototypes, continue work on final
Homework: read + journal Fullerton ch. 15, read Zinesters ch. 1, play Unmanned

4/28 WEEK 14: final presentations, pizza party, frontiers in virtual reality
Homework: upload final deliverable and documentation onto BXMC school servers

FINAL DELIVERABLES ARE DUE A WEEK AFTER, ON 5/5
NO FINAL EXAM

IDM PROGRAM LEARNING OBJECTIVES
- develop conceptual thinking skills to generate ideas and content in order to solve problems or create opportunities.
- develop technical skills to realize their ideas.
- develop critical thinking skills that will allow them to analyze and position their work within cultural, historic, aesthetic, economic, and technological contexts.
- gain knowledge of professional practices and organizations by developing their verbal, visual, and written communication for documentation and presentation, exhibition and promotion, networking, and career preparation.
- develop collaboration skills to actively and effectively work in a team or group.

ASSESSMENT:
Students will be graded primarily on demonstrated process and technique. Students will be given grades based on a 100-point scale. Each assignment will be graded on a point scale, and these points will be added up to determine the final grade, according to the following: 98-100 A+, 92-97 A, 90-91 A-, 88-89 B+, 82-87 B, etc.

The following are the components of the grade:
Attendance & participation: 20%; Homework / Journal: 20%; Midterm: 20%
Final: Alpha milestone 15%; Final: Gold milestone 20%; IDM Work Documentation 5%

ATTENDANCE AND PARTICIPATION:
The attendance and participation portion of your grade is based on the following:
• Your attendance in class and tardiness. After 2 unexcused absences, every further absence will decrease your class grade by a level (e.g. A >> B)... 4 is grounds for failure.
• Participation in group discussions and critiques
• Peer grades and participation in writing group evaluations

STUDENT DOCUMENTATION
Students must document their FINAL project on IDM servers located at sites.bxmc.poly.edu
For webspace / instructions / access, please contact: Elton Kwok, IDM Technology Director, MAGNET 883, eltonkwok@nyu.edu, for space on sites.bxmc.poly.edu.

STATEMENT OF ACADEMIC INTEGRITY
Plagiarism is presenting someone else's work as though it were your own: A sequence of words quoted without quotation marks from another writer or a paraphrased passage from another writer's work or facts, ideas or images composed by someone else.
engineering.nyu.edu/academics/code-of-conduct/academic-dishonesty

ACCESSIBILITY
Academic accommodations are available for students with documented disabilities. Please contact the Moses Center for Students with Disabilities at 212-998-4980 for further information.