DM-UY 2153-B: Intro To Game Development

Mon. & Wed., 4:30p – 6:20p
2 Metrotech Center, Room 817
3 units, Fall 2015

INSTRUCTOR:
Diego Garcia <deg346@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

MATERIALS / TOOLS: (for 2nd half of semester)
- A laptop computer of some sort... the lab workstations are generally unreliable for this
- Unity, free version – unity3d.com (Don't pirate unity pro. It'll be old and buggy. Let's work together with the free version!! It's free, so like...)
- SourceTree (Also free. I love that about it.)

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, tbqh imho) 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/radstronomical/poly_gamedev_fall2015

- MIDTERM group project: nondigital 2+ player game following a secret theme
- FINAL group project: a digital 2+ player game following a secret theme

COURSE STRUCTURE:
- Showing up is the most important part of class. You MUST attend both days each week.
- 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.
- Monday is usually more structured LECTURE. Wednesday is more self-directed LAB time.

THERE IS NO FINAL EXAM. So nice! Ignore the registrar / final exam schedule for this class.

SCHEDULE (* tentative, subject to change)

8/31 (9/2) WEEK 1: *NO MONDAY CLASS* Meet & Greet, Game Dev Overview, Lab: Mod Turtle Wushu
Homework: Get Book, Read + Journal Fullerton ch. 1, Write out a complete Wushu variant

9/7 (9/9) WEEK 2: *NO MONDAY CLASS* Formal Game Elements, Deconstructing Your ~Fav~ Sports
Homework: Read + Journal Fullerton ch. 3 & Zimmerman/Salen article, Prototype Abstract Game

9/14 WEEK 3: Depth, Balance, and Accessibility, Playtest Abstract Games, Librande Balance Exercise
Homework: Read + Journal Hunicke MDA paper, Continue Abstract Game ;)

9/21 WEEK 4: Games and Stories, Ideation Processes !!! BEGIN MIDTERM PROJECT !!!
Homework: Read + Journal Fullerton ch. 13, Group-Design and Bodystorm Midterm

9/28 WEEK 5: Playtest Midterm, Intro to Game Studies, the Magic Circle, Cheaters
Homework: Read + Journal Reading TBD, Playtest midterms

10/5 WEEK 6: Playtest Midterm, Games as Art, Games as Communication Tools
Homework: Read + Journal Fullerton ch. 9, Do + Document Midterm Project Playtest

10/12 WEEK 7: *MONDAY IS ON TUESDAY (10/13)* Discuss Playtest Results, Lab time !!! MIDTERM DUE ON WED !!!
Homework: Download + Install Unity and SourceTree on your laptop, Create a GitHub Account.

10/19 WEEK 8: Intro to Unity, Working with 3D space and Assets, Exporting
Homework: Read + Journal Door Problem, play Proteus, Make a Poetic Landscape

10/26 WEEK 9: Intro to Unity C# Code, if(statements) {learn}, Basic UI in Unity
Hmwrk: Read/Journal 10PRINT ch. 10+25, play Don't Go in the Old Greene House, make Text Adventure

11/2 WEEK 10: Vector math, Moving stuff around, Physics
Homework: read + journal What Do Prototypes..., play Crayon Physics, make Rube Goldberg Machine

11/9 WEEK 11: Physics applications, Triggers and AddForce !!! START FINAL !!!
Homework: Read + Journal Fullerton ch. 7, Group-Design and Brainstorm Project

11/16 WEEK 12: Scripting Game Logic, Planning Production and Collaboration
Homework: Read + Journal Reading TBD, Iterate on Final Project

11/23 WEEK 13: *NO WEDNESDAY CLASS* Playtest final project, Targeted Question Time!
Homework: Read + Journal Fullerton ch. 15, Iterate on Final Project

11/30 WEEK 14: Polish, on Game Feel, Playtest final project
Homework: Read + journal Zinesters ch. 1, play Unmanned, Iterate on Final Project

12/7 WEEK 15: Triage and Crisis Management, Playtest final project
Homework: Write a Post-Partum, Iterate on Final Project

12/14 WEEK 16: !!! PRESENT FINAL !!! eat some cake? deliverables due on 12/21

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.