Winter 2010
Video Game Prototyping, Arts Col 733
5 credits
Prerequisite: Permission of instructor.
TR, 5:30 – 7:30pm
1224 Kinnear, Rm. 205

instructor: <name>
email: <address>
office hours: <hours>

Course Description
This course will introduce students to fundamental concepts and strategies for creating video games. At their core, video games must be fun. But what is fun, and how do you create it? This course will survey theories of game design, explore definitions of *fun*, *game*, and *play*, and focus on underlying mechanics that work in concert to make a video game fun to play.

Course Learning Goals
Video games present unique challenges for development, requiring interdisciplinary skill sets and efficient teamwork. They also present unique opportunities for building creative interactive art that is experienced collaboratively by multiple players. This will require the development of knowledge and skills as follows:
- Students will develop an appreciation for the Golden Age of video game history
- Students will engage in playing and analyzing a wide variety of video games
- Students will demonstrate an understanding of common game mechanics and the difference between *game design* and *game mechanics*
- Students will be able to articulate definitions of *fun*, *game*, and *play*
- Students will gain a foundational grasp of game design theory and apply theories of game design to critique and improve game prototypes
- Students will build several working game prototypes that can be played online

Course Methodology
The class format will follow a general schedule of lecture, demonstration, homework, critique, discussion. Examples will be presented in lectures and demonstrations. Students will present their work in critique sessions, to facilitate discussion of the topic at hand. Lectures topics will be focused on video game history, archetypal game genres, fundamental game mechanics, and technical considerations for game creation. Students will be expected to engage in class discussions of assigned reading and to identify, play, and report on existing video games, analyzing their design and mechanics.

Students will prototype novel game ideas and explore applications of core game mechanics by creating Flash games compatible with the Playstation3 Internet Browser. Student games will be presented and critiqued in class, and further revised based on feedback. Development tools and code libraries will be provided to shorten the production cycle and keep student effort focused on exploration of novel game concepts. Examples will be given to illustrate concepts and techniques, but students will prototype and discuss their own games.

Course Required and Optional Materials
Book: High Score: The Illustrated History of Electronic Games, McGrawHill
Selections from the bibliography are collected in the course packet and are required reading. The course packet is available from Grade A Notes.

Grading Criteria
Students must demonstrate satisfactory achievement of course objectives by skillfully completing course assignments and contributing to class discussions and critiques. Since building a game requires a large number of steps achieved over time, students will be given a grade based on assigned tasks and milestones as listed under **Assignments**. The grade will be based on the quality of completion for the assignment.

Deadlines: Adherence to deadlines is expected. It is the individual student's responsibility to keep track of deadlines and to present the work to the class and instructor on the specified dates. Late assignments will have their grade lowered by one-third per missed class (e.g. B to B- for an assignment one class late).

Students choosing to use "at home" hardware and software must have their current working files on the course system and available for review at the beginning of each and every class. Problems with home systems or incompatibilities will not be an acceptable excuse for missed goals. Technical problems will happen frequently during the quarter and students will have trouble accessing the computer lab during "prime time" hours. Students must make their own arrangements for overcoming these difficulties and submitting their work on time. Unless there is a complete system failure in a computer-related course, technical difficulties are never an acceptable excuse for not meeting a deadline. Students should plan their time and workload to anticipate the technical hurdles that are a part of this profession.

Attendance: All students are required to be on time and in attendance for each and every class. Students arriving to class more than 15 minutes late will be counted as absent. Two absences will lower a final grade by one-third (e.g. B to B-), three absences will lower a final grade by one letter (e.g. B- to C-) and four absences will result in failure of the course.

Course Assignments
Students will be given an overall grade based on their coursework weighted as follows:

20%   Class Discussions
   Description: Students will engage in class discussions of assigned readings on game design theory.
20%   Twenty Game Analyses
   Description: Each week students will prepare and present two short analytical accounts on existing video games, as specified in the Course Weekly Schedule, focusing on the game's design and mechanics and preparing their observations for class discussion around these games.
20%   Five Game Proposals
   Description: Students propose and present novel ideas for game play and mechanics for five games of their own design.
20%   Five Game Prototypes
   Description: Students will prototype their game ideas that were proposed and explore applications of core game mechanics by creating these ideas as Flash games compatible with the Playstation3 Internet Browser.
20%   Final Presentation
   Description: Students will present and make available for play their final Game 5 prototype.

Course Grading Scale
A = 100% - 95%   C+ = 79% - 77%
A- = 94% - 90%   C = 76% - 74%
B+ = 89% - 87%   C- = 73% - 70%
B = 86% - 84%   D+ = 69% - 64%
B- = 83% - 80%   D = 63% - 60%
                        E = 59% - 0%

Course Weekly Schedule
Week01
read & discuss:
Intro to Tool Chain for Game Development, Game Dev Specs (T)
Basic Game Structure: example and dissection, How to Prototype a Game in 7 Days (R)
play & dissect (pick 2): *basic* - Rock, Whac-a-mole, Memory, Ship
assigned: *Game I (T)*
due: *Game I Proposal (R)*

Week02
read & discuss:
What is Fun? What is its relationship to Play?, What is Gameplay?, Why Play is Vital, Games Better than Life (T)
Define 'Video Game', Define 'Game Design', What are Game Mechanics? (R)
play & dissect (pick 2): *exploration* - Adventure, Rogue, Pac-man, Super Mario Bros, Maze
test: *Game I (R)*

Week03
read & discuss:
High Score, The Illustrated History of Electronic Games, Chapt. 1
The Game Design Reader, A Rules of Play Anthology., selected reading
play & dissect (pick 2): *narrative* - Zork, Monkey Island, Space Quest, Myst
due: *Game I (T)*
assigned: *Game II (T)*
due: *Game II Proposal (R)*

Week04
read & discuss:
High Score, The Illustrated History of Electronic Games, Chapt. 2
play & dissect (pick 2): *audio* - Dance-Dance Revolution, Audio Maze, Simon, Parappa, Rez
test: *Game II (R)*

Week05
read & discuss:
High Score, The Illustrated History of Electronic Games, Chapt. 3
A Theory of Fun, selected reading
play & dissect (pick 2): *intensity* - Robotron, Asteroids, Centepede, Tempest, Raiden
due: *Game II (T)*
assigned: *Game III (T)*
due: *Game III Proposal (R)*

Week06
read & discuss:
High Score, The Illustrated History of Electronic Games, Chapt. 4
play & dissect (pick 2): *driving* - Night Driver, Sprint, Spy Hunter, Outrun
test: *Game III (R)*

Week07
read & discuss:
The Art of Game Design: a book of lenses - The Experience Arises Out Of The Game
play & dissect (pick 2): *sports* - Ping-pong, Track & field, Football, Basketball, Hockey, Soccer
due: *Game III (T)*
assigned: *Game IV (T)*
due: *Game IV Proposal (R)*

Week08
read & discuss:
Game Design Workshop – Working with System Dynamics
play & dissect (pick 2): *puzzles* - Sokoban, Cat Escape, Ball shot, Alien attack, Tetris, Locked in the office
test: *Game IV (R)*

Week09
play & dissect (pick 2): *dexterity* – Mini Golf, Finger racer, Kick-ups
due: *Game IV (T)*
assigned: *Game V (T)*
due: *Game V Proposal (R)*

Week10
play & dissect (pick 2): *strategy* - Lode Runner, Turf Wars, Tower Defense
test: *Game V (R)*

Finals
due: *Game V (R)*

Course Bibliography

The 400 Project.
<http://www.theinspiracy.com/Current%20Rules%20Master%20List.htm>
Brathwaite, Brenda, and Ian Schreiber, *Challenges for Game Designers*.
Charles River Media; 1st edition (August 21, 2008). ISBN-13: 978-1-584-50580-8.
The Dot Eaters.
<http://www.thedoteaters.com/>
Fullerton, Tracy, *Game Design Workshop: A Playcentric Approach to Creating Innovative Games*.
Morgan Kaufmann; 2nd edition (February 8, 2008). ISBN-13: 978-0-240-80974-8
GamesLOL.
<http://www.gameslol.com/>
KLOV.
<http://klov.com/>
Koster, Raph, *A Theory of Fun for Game Design*.
Paraglyph; 1st edition (November 6, 2004). ISBN-13: 978-1-932-11197-2
Lost Garden.
<http://www.lostgarden.com/>
Salen, Katie, and Eric Zimmerman, *Rules of Play, Game Design Fundamentals*.
MIT Press (October 2003). ISBN-13: 978-0-262-24045-1
Salen, Katie, and Eric Zimmerman (Eds.), *The Game Design Reader, A Rules of Play Anthology*.
MIT Press (December 2005). ISBN-13: 978-0-262-19536-2

Academic Integrity

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.
If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Any and all suspected cases of academic dishonesty will be dealt with according to university procedures. Students are referred to the student handbook for further information on academic dishonesty and the accompanying procedures and penalties. Additional info
http://oaa.osu.edu/coam/home.html

Accommodations for Students with Disabilities
Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. Please contact the Office for Disability Services at 614-292-3307 in room 150

Pomerene Hall to coordinate reasonable accommodations for students with documented disabilities.

Personal Safety
When taking courses and working at ACCAD you should remember that you are member of a community that includes our group as well as the Ohio SuperComputer Center. As a way of maintaining building security, public spaces at 1224 Kinnear are monitored by video 24 hours/day. Entry to the building requires that students use their BuckID for access after-hours (5pm – 8am) on weekdays and in all hours of the weekend. Students should never open any outside entrance door to any person(s) after hours or on weekends. Students, staff and faculty who are working in the building should be able to access the building with their own BuckIDs.

The University Escort Service operates after 6pm until 3am when classes are in session (i.e. not during quarter breaks and University holidays), and will assist OSU students who live off campus as well as on campus. The University Escort Service can be contacted at 614-292-3322, and scheduled pick-ups are taken in advance.