

COMP 5900: Game Design Workshop

Contact

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Prerequisites

Good programming ability and familiarity with a variety of games.

Textbooks and Resources

There is no required textbook for the course. Paper readings will be assigned throughout the term. You may benefit from reading a text on games and game design; two that are particularly helpful are

- *Rules of Play*, Katie Salen and Eric Zimmerman
- *Characteristics of Games*, George Elias et al.

We will use the **processing** programming environment in this course, available from www.processing.org. Familiarity with the libraries for this environment, especially sound, physics, and path planning, will be enormously helpful. In past offerings, the most successful designs were those that used standard technology to support their design innovations rather than trying to write everything from scratch.

Topics

The course's topics include the following (not an exhaustive list):

- Theory of fun
- Clarity and uncertainty
- Game theory and game balance
- The game economy
- Player rewards and reward schedules
- Pacing of games
- Game mechanics
- Narrative in games: the Hero's Journey and alternative frameworks

Course Ethos

The intent of the course is to explore design solutions to issues in games. Of necessity, we will concentrate on small games; polished examples of such games include *Sunless Sea*, *Invisible, Inc.*, and *FTL*. For the purposes of this course, arcade-style performative games are considered uninteresting; games created for this class should require informed decisionmaking from their players.

Course Structure

The course will be largely discussion-based, with occasional lectures. The main activity of the course will be a series of design exercises, in which the class is posed a design problem each week. Every week, some students will individually create small games responding to the week's challenge. The class will review the games and discuss the effectiveness of the design elements used in the games.

Grading Scheme

Design exercises: 50%
Course project: 30%
Reviews and discussion: 20%

Course Project

Each student will undertake a larger project over the span of the term, working either alone or in a group of two. Typically, the project will be a game, created in whatever technology you choose; paper is a possible technology (i.e., a board game). Identify and try to address a specific design problem. The project should emphasize novelty and thoughtfulness in design over complexity of assets and implementation. Projects will be presented to the class in the last week of the term.

A project proposal describing the design problem and your intended result will be due near the end of September. The final project will be due at the end of the term, and will include your game (if applicable), plus a design and postmortem paper. The paper will identify and motivate the problem, discuss your solution and other possible solutions, describe your development effort, and evaluate the result. Be bold in your imaginings but frank in your evaluation. A flawed but ambitious experiment will be regarded more kindly than a polished effort that only implements known solutions.