

Intro to Interactive Entertainment

Spring 2017 – Syllabus

CS 1010

Instructor: Tim Fowers

Email: tim@fowers.net

◆ 1) Introduction

Basics of Game Design: definition of a game, terminology and basic design categories.

Workshop: Team Game

Design a team game that can be played by everyone in the class. You can only use items found in the classroom.

Homework (1 point)

Pick a non-electronic game you enjoy playing and play that game with a group of friends. Analyze the game using the topics discussed in class. Write a review of the game.

◆ 2) Game History

A brief history of gaming from early folk games to today's giant game corporations. An overview of popular game genres will also be presented.

Workshop: Goals

Play a simple game multiple times, changing the goal each time. How does the emotional feel of the game change as the goal changes?

Homework (1 point)

Begin work on your final project. Come up with a theme for your game and write up a short description of your game idea. You will present this idea to the class next week.

◆ 3) Writing Rules

Students will present their final project ideas to the class. After the presentations, we will discuss a basic framework for writing game rules.

Workshop: Rules

Customize a deck of cards with special rules for each suit. Challenge other players to duels and see whose deck wins. After each duel, discuss the balance with your opponent.

Strengthen suits that were too weak and weaken suits that were too strong. Find a new opponent and repeat the process until every deck feels comparably balanced.

Homework (1 point)

Using the techniques discussed in class, write an outline of the rules for your final project.

◆ 4) History of Computer Games

Overview of computer games, from early Teletype text games to the latest generation of consoles. We will also examine the different genres of computer games.

Workshop: Obstacles

Make a “par 5” obstacle course using a ball and random objects found in the classroom. All the students will play each other’s courses. Keep score to find out if the average player can make it to the goal in five attempts.

Homework

Work on your final project and bring the rules and pieces to class next week for playtesting with the group.

◆ 5) Final Project Review 1

Students will present their final projects to the class.

Workshop: Playtesting

We will playtest the games and provide feedback and critiques to the designer.

Homework (1 point)

Play your final project with your friends or family members. Take detailed notes about their interest levels and the comments they make. Using your notes, write a paper that describes changes you would like to make to your game. Explain why.

◆ 6) Design Documents

While some card and board games can be designed and created by one author, many games (especially digital games) require a large team. This class will discuss writing a design document to keep large projects organized.

Workshop: Design Jam

You will be given a random design problem involving a budget, staff, deadline, creative vision, and technology platform. Working in a small team quickly design the game's structure and make a paper prototype of one of its systems.

Homework (1 point)

Write a mini design document for a fictitious computer game. Also, bring in your final project for the next workshop.

◆ 7) Play Balance

Play balance theory and practical techniques used to balance games.

Workshop: Opposition

Design a game where players must work together to stop a rampaging robot from destroying a nearby town. Design the AI for the robot and then try to beat your own creation.

Homework (1 point)

Play a single player game on Kongregate.com and write a paper that describes the game balance. Was the opposition balanced? Did the game get more interesting as you played? Were the decisions that you made balanced against each other?

◆ 8) Statistics and Probabilities

Thorough game design requires an understanding and analysis of the odds and probabilities in the game. In this class we will cover simple statistical formulas that can be used to analyze a game.

Workshop: Odds

Make a squadron of spaceships using dice. Create odds tables based on the different events that might occur. Play the game with others in the class and record the actual numbers. How does the reality correspond to the odds?

Homework (1 point)

Solve all the problems on the probability worksheet.

◆ 9) Reward Systems

Why are we compelled to keep playing certain games when our bodies are telling us to eat or sleep? We will look at some basic behavioral psychology studies and apply the results to game design. We will also examine many different types of games and try to understand why some can be played repeatedly, while others are played once then shelved.

Workshop: Rewards

Design a Vegas casino game. Try to entice players to your table and keep them there. Be careful about giving away too much money or your casino will go broke. But if you give away too little then your players will leave to visit another table.

Homework (1 point)

Replay the game from Kongregate.com that you played 2 weeks ago. Write a paper that describes the reward system. How does the game reward and penalize you?

◆ 9) Final Project Review 2

Presentations of the students' final projects.

Workshop: Playtesting

Play and critique the final project games. The game designer will not be allowed to settle rules disputes and questions. Instead, the players must rely completely on the rulebook.

Homework (1 point)

Using feedback from today's session, write a second draft version of the rulebook for your final project. Include illustrations.

◆ 10) Level Design

We will talk about general design principles for designing a level. Many of these techniques can be applied to both board games and digital games.

Workshop: Paper Simulations

Pick a favorite video game and create a simulation of it using only blank index cards, tokens and dice. You will lose the graphics, the sound effects and input controllers. But what elements of the game survive the conversion from electronics to paper?

Homework

Update the rules for your final project and make sure your game is ready for others to play. Bring the rules and the game in next week.

◆ 11) Atmosphere

While a game can be abstract, adding a theme can help draw players into your game world. This week's lecture will examine how the "flavor" of a game can enhance the game player's experience.

Workshop: Thematic Decisions

Design a character that could appear in a low-budget zombie movie. Create a set of options that describe how that character would move and attack if trapped in a room filled with zombies. Make sure that all the options are thematically appropriate. For instance, a Sheriff would be expected to carry a gun, but a Priest would not.

Homework (1 point)

Work on your final project. Focus on elements that will add atmosphere to your game such as colors, fonts, characters and story.

◆ 12) Monetization

This week we will talk about different ways to charge for your game, Free to Play, Subscription or Purchase outright. We will also discuss crowdfunding, investor funding and being indie.

◆ 13) Community Management

This week we will discuss community management and how to process community feedback and ideas into your design. Early Access games and open development create new challenges and opportunities for design.

◆ 14) Social Gaming

Social games, from casual mobile games to large scale MMOs, present many challenges for a game designer. How do you make changes while the game is live? How do you balance cooperation vs. competition? What happens when the players begin to play the game in ways the original designers never intended?

Workshop: Playtesting

This is the last chance to playtest your final project game. Work on formalizing the rules, enhancing the player interface and polishing the play mechanics.

Homework

Finish your final projects and bring them to the next class session. Be prepared to discuss your game and its evolution. What changed and why? Your final game should be extensively playtested. (You will need to turn in your playtest results along with a statistical analysis).

◆ 15) Final Projects

Presentations of the students' final projects.

Workshop: Playing games

We will play all of the final projects. Projects will be graded offsite over the weekend and final grades will be emailed to the students.

◆ Grading

Grading is based on a percentage scale from 0 – 100%.

Attendance is worth 65%

Homework counts as 10%

Final project is worth 25%.

90 – 100%:	A
80 – 89%:	B
70 – 79%:	C
60 – 69%:	D
0 – 59%:	Failure

Attendance

Since this is a workshop class, grading will primarily be based on attendance and class participation. 65% of a student's grade will be determined by attendance; there are 30 classes, each worth approximately 2% of your grade.

Attendance is the most important factor of a student's final grade. In addition to losing the attendance score, missing a class will usually result in another minus 1% because of the late homework. There is no way to make up a missed class.

Homework

There will be one homework assignment each week. Homework must be turned in the following week. Late homework assignments will be reviewed, but will not add to a student's final grade. Ten of the assignments are worth 1 point each.

Homework assignments must be written on a computer and printed out prior to class. Homework sent through email will not be accepted.

Final Project

Final projects count for 25% of each student's grade. The final project is a complete game and is graded as follows:

- 5%: Rulebook (ease of use, organization, clearly written)
- 5%: Graphic Design (layout, colors, interface, etc.)
- 5%: Analysis (lessons learned, playtest notes, statistics, etc.)
- 10%: “Fun” factor (replay value, theme, originality, etc.)

Policies:

CS Department policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct.

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in Room 181 of the Student Service Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary.