

CSAT 2315: INTRODUCTION TO GAME DESIGN

12.30-1.45pm, Monday and Wednesday | January – May, 2015 | Room BAB 303, SRSU

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Office Hours: MW: 11am-12.30pm TR: 3.15-4.15pm F: 11am-12pm and by appointment

Course Introduction

In this class you will learn how to translate and refine ideas into playable games. You will study the history of games and play, keep a journal of games played, quickly create and test your game ideas using non-digital means, learn how to analyze games, read important game studies texts, and build a digital prototype using YoYo Game's *GameMaker* software.

Learning Objectives

In this course, you will:

- Become familiar with the history of digital games
- Study the mechanics of what makes a game fun
- Brainstorm concepts for games, quickly build them, and tweak them until successful
- Learn how to build paper prototypes of your game ideas
- Use GameMaker to develop a working digital prototype of your final game idea

Grading and Evaluation

You will be graded on exercises, attendance and participation in discussions and critiques, homework projects, and a final project. All assignments will be evaluated for concept, fun, execution, and imagination.

Each project, apart from the exam, will be graded using the following scale. Details on how to pass each project is included in the project's description.

- 100% - *Exceptional. Gone beyond what is required of the project, and produced excellent work*
- 80% - *Good. Does what is needed of the project.*
- 60% - *Mediocre. Completed project with minimal effort.*
- 0% - *Not submitted, or completed incorrectly.*

Please note that no extra-credit projects will be offered, so it is in your interest to submit work by the deadline.

The exam will be graded on a scale from 0-100%.

Please note that work submitted **no later** than the beginning of class, the day of the deadline, will be graded.

Any work submitted *one minute* past the beginning of class will be awarded a zero. There are no exceptions to this rule.

Your final grade will consist of:

- Exercises : 30%
- Attendance and participation : 25%
- Final project : 30% (5% paper prototype; 10% work-in-progress, 15% final version)
- Game Journal: 15%

Attendance and Participation – 25%

Being present in class, answering questions, and discussing assigned articles, are all an important part of understanding the theory of game design. Testing out ideas and theories with classmates and the professor is how you become a better game designer. Introduction to Game Design is not a programming or art course; instead it's an ideas course – developing them and constantly improving them through iteration.

Game Journal – 15%

In class we do not have time to touch much gaming history so this is a way for you to look into gaming's past. Achieving 100% is pretty easy – turn the document in on time, and note your findings on at least thirty games using the format provided.

Class exercises – 30%

These exercises are where you apply your thoughts, conversations, and discussions about gaming. Each exercise focuses on a particular element of gaming so that you can apply the theoretical to a physical paper prototype. Each exercise will be graded as follows:

- 33% - *Did the project meet the objectives? For instance, if the exercise was one on strategy, were any elements of strategy present in the game?*
- 33% - *How imaginative was the game? Did the student design an interesting solution to the problem?*
- 34% - *How much effort was put into the exercise?*

Paper Prototype – 5%

This is a non-digital version of the final game created using cardboard, paper, etc. Building this gives you a sense of how your game will work. Creating a non-digital version also allows you to quickly modify rules and elements of their game, something that would be much more time consuming if dealing with code. I do expect the prototype to differ from the final digital version but the essence of the game should remain the same. Not every game will be able to be fully realized as a paper prototype but at least some element will.

Work-in-progress – 10%

For this you must present a roughly working version of your digital or board game. Things will probably change between now and the submission of your final project. What you submit for the work-in-progress must be functional enough so that the class and professor can get a sense of how it works.

Final game – 15%

Your final game will be created in *GameMaker* or as a highly produced board game.

- Effort, 30% - *Have you put enough time into this? Remember that while the game needs to be visually clear and easy to understand, graphics are NOT a large part of your grade.*
 - Technical, 30% - *Does the game run well? If it is a board game, are all the pieces and elements present and work well? Are there clear instructions and no confusion about which element is what?*
 - Fun, 10% - *Is the game fun to play?*
 - Originality, 30% - *How interesting and original is the game? If derivative, does it introduce interesting concepts or some other unusual element?*
- Exercises : 30%
 - Attendance and participation : 25%
 - Final project : 30% (15% paper prototype; 15% final version)
 - Game Journal: 15%

Note on homework and readings: Unless otherwise noted, homework and readings are due the following class. Your participation in discussions of readings will be factor into your attendance and participation grade. GameMaker homework assignments are provided as guidelines for helping you pace this **self-taught** component of the course. Begin and finish each tutorial at your own pace, but all GameMaker tutorials should be completed **before** Spring Break.

Materials and Text

- A personal copy of YoYo Game's *GameMaker Studio* software
- 4GB (at least) jump/flash drive
- Index cards, scissors, Elmer's glue (or equivalent), masking tape, sticky tape, pencils, colored pencils, colored highlighters, a pocket notebook (preferably unlined), at least 4 sheets of poster board, and more to be announced.

Each student is given space to store their work on the Sul Ross server. However, it is important you also save your work to another location too. Flash drives can be bought online or at the Sul Ross library.

The following texts are not required for class but are **highly recommended** if you choose to pursue game design.

- **Rules of Play: Game Design Fundamentals** - Katie Salen and Eric Zimmerman
ISBN-10: 0262240459
- **The Art of Game Design: A book of lenses** - Jesse Schell
ISBN-10: 0123694965
- **Game Design Workshop, Second Edition: A Playcentric Approach to Creating Innovative Games** - Tracy Fullerton
ISBN-10: 0240809742
- **A Theory of Fun** – Ralph Koster
ISBN-10: 1449363210
- **Edge Magazine** – Monthly periodical available at the Sul Ross library
- www.gamasutra.com – One of the best websites for keeping up with the gaming industry
- www.Polygon.com – Excellent reviews and features

Rules and expectations

Attendance is **compulsory**. If you must miss a class for a school-related activity, the absence must be discussed (and arrangements made regarding coursework) **prior to the absence**. If you must miss a class for an emergency or illness, please contact me **by email or phone as soon as possible**. Six (6) absences result in you being dropped from the course with a grade of "F" as per Sul Ross State University policy. Five (5) unexcused absences will result in a zero for your attendance and participation grade. Arriving to class **on time** is also essential – **arriving late more than two times will be counted as one absence. Lateness is defined as 15-minutes after the start of class. Leaving before class ends will result in you being marked absent.**

Below is a guide to how much each absence impacts your attendance and participation grade.

- | | | | |
|---------------------------------|------|--------------------------------|--------|
| ● One (1) unexcused absence: | -20% | ● Four (4) unexcused absences: | -80% |
| ● Two (2) unexcused absences: | -40% | ● Five (5) unexcused absences: | - 100% |
| ● Three (3) unexcused absences: | -60% | ● Six (6) unexcused absences: | FAIL |

No cell phone usage. No social-networking websites. No instant-messaging. No checking personal emails. Headphones and earbuds are allowable **ONLY** when you are working, but not when the professor or a fellow student is speaking. **Doing any of these, or anything I consider disruptive to the class, will drastically drop your attendance and participation grade.**

Late work will not be accepted.

Plagiarizing, cheating, or any other dishonest behavior in the classroom will not be tolerated. Rules and regulations regarding plagiarism, dishonesty, and other issues concerning classroom participation can be found in University Rules and Regulations and Student Handbook. This course will abide by these established

policies. A student found to be engaging in these activities will be penalized to the full extent of Sul Ross State University policy.

ADA Needs

It is Sul Ross State University policy to provide reasonable accommodations to students with disabilities. If a student would like to request such accommodations because of a physical, mental, or learning disability, please contact the ADA Coordinator in the Ferguson Hall, room 112 or call (432) 837-8691. Please relate all requests for special accommodations to the instructor by the third class period.

Please note that this syllabus and calendar are subject to change.

COURSE SCHEDULE

--- WEEK 1 ---

January 21 (W) *In Class*

Syllabus review.
Introduction to the game journal.
Talk about the last game you played.

Homework

Begin your game journal.
Read: *I have no words and must design.*

--- WEEK 2 ---

January 26 (M) *In Class*

Discuss: *I have no words and must design.*
Presentation: *History of Board Games*
Introduction to GameMaker.

Homework

Complete GameMaker tutorial *Tutorials > YoYo Tutorials > Beginner > 01_My_First_Game*

January 28 (W) *In Class*

Brainstorming.

Homework

Write up your **three** best ideas for the next class.

--- WEEK 3 ---

February 2 (M) *In Class*

Present your game concept to the class for feedback.

Homework

Answer the questions about your game, and include a 100-word paragraph describing the overall game.

Complete GameMaker Tutorial *Tutorials > YoYo Tutorials > Beginner > 01_Scrolling_Shooter_Part1*

February 4 (W) *In Class*

DUE TODAY: 100 word outline of your best game idea, along with the answers to the questions.

Introduction to paper prototypes.

Homework

Read: *The 4 Fs of Game Design*

--- WEEK 4 ---

February 9 (M) *In Class*

Discuss: *The 4 Fs of Game Design*

Exercise 1: Working on your own or with a classmate, turn a digital game into a non-digital game.

Homework

Finish non-digital game for next class.

February 11 (W) *In Class*

Presentation: *8 kinds of fun*.

Exercise 2: Using Microsoft Excel or Word, create a grid containing eight games, matching each one to 8 kinds of fun.

Homework

Complete GameMaker tutorial *Tutorials > YoYo Tutorials > Beginner > 02_Scrolling_Shooter_Part2*.

--- WEEK 5 ---

February 16 (M) *In Class*

Presentation: *Rules and Choices*.

Exercise 3: The Path.

Homework

Finish The Path for next class.

Write up the rules for your final project for next class.

February 18 (W) *In Class*

Play The Path.

Homework

Read: *MDA* article.

Submit the rules of your final game

Presentation: *History of digital games*.

Gather materials for the next class to create a paper prototype of your final game.

--- WEEK 6 ---

February 23 (M) *In Class*

Discuss *MDA* article.

Work on paper prototype of your final game.

Homework

Finish your paper prototype for next class.

February 25 (W) *In Class*

Play-test your working paper prototype.

Homework

Modify the paper prototype of your game using valid player criticism. Begin collecting feedback on your game from friends and family to incorporate into your final prototype, due **March 4**.

--- WEEK 7 ---

March 2 (M) *In Class*

Presentation: *Conflict and Opposition*

Exercise 4: Create a game that has an intelligent enemy.

Homework

Finish your intelligent enemy game for next game.

March 4 (W) *In Class*

PAPER PROTOTYPE DUE

Presentation: *Psychology and Replayability*

Play the intelligent enemy games from the previous class

--- WEEK 8 ---

March 9 (M) *In Class*

Presentation: *Reward and Punishment*

Begin building GameMaker version of your final game.

Homework

Bring materials to next class to construct an assault course.

March 11 (W) *In Class*

Presentation: *Level Design*.

Exercise 5: Assault course.

Homework

Finish your assault course for the next class.

--- WEEK 9 ---

March 16-20 *** SPRING BREAK ***

--- WEEK 10 ---

March 23 (M) *In Class*

Play assault courses from last class.
Work on your final project in *GameMaker*.

Homework

Continue working on your final project in *GameMaker*.

March 25 (W) *In Class*

Continue working on your final project in *GameMaker*.

Homework

Continue working on your final project in *GameMaker*.
Read *Columbine*, *VideoGames as Expression*, and *Ineffability*

--- WEEK 11 ---

March 30 (M) *In Class*

Discuss: *Columbine*, *VideoGames as Expression*, and *Ineffability*.

Exercise 6: Modify tic-tac-toe to include an element of chance AND make it fun for adults.

Homework

Finish your tic-tac-toe game for next class.

April 1 (W) *In Class*

Play tic-tac-toe game from last class.
Continue working on your final project in *GameMaker*.

Homework

Remember that your game journal is **due April 8**.

Read *On Authorship in Games*.

Your WORK-IN-PROGRESS demo and game journals are due next week.

--- WEEK 12 ---

April 6 (M) *In Class*

Discuss *On Authorship in Games*.

Presentation: *Balance*.

Work on your final game.

Homework

Work on your final game. Your WORK-IN-PROGRESS demo and game journal is due next class.

April 8 (W) *In Class*

DUE TODAY: WORK IN PROGRESS DEMOS. Play-test your final project with fellow students, making notes of their comments. Note that this is worth 5% of your overall grade.

DUE TODAY: Game journal.

Homework

Improve your final project according to suggestions you agree with.

--- WEEK 13 ---

April 13 (M) *In Class*

Presentation: *Strategy*.

Exercise 7: Create a game based on a dangerous occupation. Your game must include elements of strategy and luck.

Homework

Finish your strategy game for next class.

April 15 (W) *In Class* Play strategy game from last class.
 Homework Continue working on your final project in *GameMaker*.

--- WEEK 14 & 15---

April 20 (M) *In Class* Continue working on your final project in *GameMaker*.
 Homework

Fine tune your final game.

April 22 – May 6 *In Class & Homework* : Play-test and work on your final project.

FINAL PROJECT DUE AT 5PM ON SUNDAY, MAY 10.

--- EXAMINATION WEEK ---

May 13 (W) Examination 12.30pm. For the exam you will present and demonstrate your game to the class.