Course Syllabus: Game Design

Course: Game Design

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Course Overview: "Gaming" doesn’t only mean “video games”. Gamers also play board games, card games, simulations, and participate in interactive stories. This course breaks down the design process step by step. Students learn the fundamentals of game mechanics, game art, and game narratives. Their final project includes building, playtesting, and continually improving a team built board game that can be played with friends and added to their game portfolio.

Learning Outcomes: By the end of the Game Design course, students will demonstrate proficiency with:
- identifying the fundamental skills and techniques of game design
- Applying the fundamental skills and techniques of game design in the construction of a game prototype
- Refining a game prototype through a productive cycle of play testing
- Participating in the iterative process in a mutually respectful, collaborative team environment
- Executing a well-planned presentation that includes an analysis of the final product and game design process
- Exploring college and career opportunities in game design

Length of Course: Semester
Hours of Instruction: 4-7 hours/week
Assessment: Rubrics designed for Authentic Assessment of Project Based Learning Activities
Educational Resources Required: Online content provided through the Zulama.com LMS

Suggested Reading: A Theory of Fun for Game Design, by Raph Koster

Materials and Supplies: Students will create pieces, boards, cards and prototypes of their games to play with their friends, family, and in class. Students will need access to foam-core, scissors, markers, tape, and other basic art supplies. Learning to create paper prototypes is essential for any serious game designer.

Module 1: Define a Game
Lesson 1: What is a Game? Assignment: Fun to Play
Lesson 2: Game Genres
Lesson 3: Designing Board Games
Assignment: Re-design a Children’s game
Assignment: I am a game designer

Module 2: The Process of Game Design
Lesson 4: Game Mechanics
Assignment: The Spine
Lesson 5: Brainstorming
Assignment: Brainstorm Setting
Lesson 6: Game Production Processes
Assignment: The Game Design Cycle
Lesson 7: Prototype-Playtest Cycle
Lesson 8: What is Play?

Module 3: The Game Prototype
Lesson 9: The Design Team
Lesson 10: Documentation
Assignment: Design Document Activity
Lesson 11: Build Your Game Prototype

Module 4: Game Designer’s Tools
Lesson 12: Games and Simulations
Lesson 13: Games and Simulated Reality
Assignment: The nature of reality
Lesson 14: Psychology of Game-Play
Assignment: Reward cycles
Lesson 15: Flow

Module 5: Game Complexities
Lesson 16: Skill
Lesson 17: Chance and Probability
Lesson 18: Expected Value
Lesson 19: Methods of Game Balance
Assignment: Perfect imbalance
Assignment: Module 5 Playtest

Module 6: Games and Story
Lesson 20: Stories in Games
Assignment: Change and Conflict
Assignment: Retell a Game Story
Lesson 21: A Hero’s Journey
Assignment: Go on a hero’s journey

Lesson 22: Creating Game Characters
Assignment: Analyze a game character
Lesson 23: Types of Game Characters

Module 7: Game Worlds
Lesson 24: Transmedia Worlds
Assignment: Design an RPG Adventure
Lesson 24: Evolution of a Transmedia World

Module 8: Special Types of Games
Lesson 26: Puzzles
Assignment: Puzzles
Lesson 27: RPGs
Lesson 28: A Sample RPG System

Module 9: The Player’s Mind
Lesson 29: Board Games in the Mind
Assignment: Thinking about board games
Lesson 30: Review Role-Playing Designs
Lesson 31: Video Games in the Mind
Assignment: Thinking about video games
Lesson 32: How the Player’s Mind Works

Module 10: Reflecting on Game Design
Lesson 33: The Spark! An Idea
Assignment: Brainstorm an Original idea
Assignment: Pitch the Game Idea
Lesson 34: From idea to Prototype

Module 11: Multiplayer Games
Lesson 35: Games as Social Activity
Lesson 36: Communities in MMOs
Assignment: MMOs
Lesson 37: Designing a Revenue Stream

Module 12: Delivering Your Original Game
Lesson 38: Test Your Game
Lesson 39: Prep for Your Presentation
Lesson 40: Final Presentations
Assignment: Final presentation