

Game Design

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. You will learn the fundamentals through hands--on modding, prototyping, and iteration of a variety of games. Your final project will include building, playtesting, and revising your own original game that can be played with friends and added to your 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 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.

Course Number: 6673

Credit: 0.5

Grades: 9, 10, 11, 12

Prerequisite: Evolution of Games



Learn More...

Students who complete this course will be more well prepared for careers such as:

- Aerospace Engineer
- Animator, Multimedia Artist
- Anthropologist
- Architect
- Automotive Engineer
- Cartographer
- Computer Systems Analyst
- Corporate Trainer
- Entrepreneur
- Game Publisher, Designer, Developer

- Geospatial Information Scientist and Technologist
- Graphic Designer
- Industrial Designer
- Logistician
- Media-Related Career
- Meeting, Convention, and Event Planner
- Network Systems and Data Communications

- Producer/Director
- Project Manager
- Sociologist
- Software Developer
- Software Engineer
- Technical Writer
- Urban Planner
- Video Game Tester
- Web Developer
- Writer, Author, Editor

North Hills Technology Education



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

Lesson 24: Evolution of a Transmedia World

Assignment: Design an RPG Adventure

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