Top of Mind

- **First class:** Tuesday, January 13, 2026
- **Cancelled classes:** Friday 1/23, Friday 3/6
- **Office Hours:** Thursday 1-5pm. Book here

FCLC Undergraduate Introduction to Video Game Design Syllabus

- **Course Code:** CISC 2540
- **Schedule:** Tuesdays and Fridays, 11:30am - 12:45pm
- **Instructor:** John Bezark
- **Office Hours:** Thursday 1-5pm. Book here

Course Description:

An introductory course exploring the fundamentals of digital game design and development. This course will use Godot 4.5 as the primary game creation tool, and it will cover the basics of game development, coding fundamentals, and game design principles. Students will engage in hands-on projects to develop practical skills in both 2D and 3D game design. Students are not expected to have any prior programming or game design experience.

Course Objectives:

- Understand the principles of game design and development.
- Gain proficiency in Godot 4.5.
- Develop basic coding skills relevant to game design.
- Complete three major game design projects: a tabletop game, a 2D game, and a capstone game.
- Enhance writing and oral presentation skills through game-related assignments.
- Be able to better work in teams
- Respond to critical feedback constructively

Assessment

The work of the class consists of the following:

Assignment	Description	Due Date	Points
Class Participation	Actively participate in class discussions and contribute to group projects.		15
Tabletop Game	A playable prototype of a tabletop game	Fri 1/30	16
Tabletop Game Process Paper	Paper which documents process, execution and playtesting of tabletop game	Fri 2/6	10
Labs 1-4	4 short coding assignments designed to build proficiency. 6 points each.	2/17, 2/20, 2/27, 3/31	24
2D Game Concept Paper	A brief paper describing your concept for the 2D Game	Fri 2/13	10
2D Game	A playable prototype of a 2D game	Fri 3/20	25
Capstone Concept Presentation	A brief Presentation describing your concept for the Capstone Game	Tue 4/7 or Fri 4/10	10
Game Review	Play one of the suggested games and review it!	Tue 4/21	10
Capstone Game	A polished game. Can be an evolution of the 2D game or something new.	Finals Week (TBD)	30
Total Points Possible			**150**

All assignments will be graded on the due date. Students are always allowed to revise and resubmit work **up until the class before the final.**

Attendance: Students are allowed 6 absences. After this, each unexcused absence will lower your final grade by 1/2 a letter, i.e. B+ -> B or A -> A-

Course Outline

The course is split into 3 distinct modules each with a unique project: - Week 1-2: Game Design Fundamentals and tabletop design - Week 3-8: 2D Game Design - Week 9-14: 3D Game Design/Final Project Development

Week 1 - Game Design Fundamentals

Tuesday 1/13 (First class)

- Who are you/Syllabus Review
- Professor John
- Game Design Fundamentals

Homework: Game Review

Friday 1/16

- The Iterative Game Design Process
- Prototyping
- Playtesting
- Group Work

Homework: Tabletop Game

Week 2 - Prototyping, Iteration and Playtesting

Tuesday 1/20

- MDA Framework - Systems, Loops and Balance
- Prototyping Tabletop Games: Balancing and Mechanics
- Reading: MDA
- MDA Framework
- Systems, Loops and Balance
- Playtesting and Group Work time

Friday 1/23 - CLASS CANCELLED

- **Work on tabletop prototypes asynchronously**
- Continue playtesting and iteration outside of class

Week 3 - Hello Godot Getting Started in 2D

Tuesday 1/27

- Playtesting

Friday 1/30

- Playtesting
- Git Init

DUE: Tabletop Game Homework: Tabletop Process Paper

Week 4 - Nodes and Scenes

Tuesday 2/3 - Nodes and Scenes Demo

- Hello Godot - Live Demo (Students Follow Along)
  - Getting started with Godot
  - Nodes and Scenes - build a simple scene together
  - Everyone ends class with the same working foundation

Homework: Lab 1

Friday 2/6 - Genres in 2D

- 2D Game Brainstorming

DUE: Process Paper Homework: 2D Game Concept Homework: 2D Game

Week 5 - Coding Fundamentals

Tuesday 2/10 - Github and nodes

- Nodes and Scenes Workshop
- Github Review
- Github Accounts, Cloning, Committing and pushing, Repo Creation

Friday 2/13 - Coding Fundamentals

- Coding Fundamentals
  - Scripts and properties
  - Variables
  - Create a moving character together using simple_character example

DUE: 2D Game Concept Homework: Lab 2

Week 6 - Input, Interactions and Patterns

Tuesday 2/17 - Input and Interactions Demo

- Coding Input and Conditional Review
- Input map

DUE: Lab 1

Friday 2/20 - Input and Interactions Workshop

- Shared Repos
  - Create, Invite, Clone
  - Pull and Push
  - Conflicts
- Using Nodes together - build item pickup mechanic together

- Area2D
  - Camera2D
  - Timer
- Functions vs Signals

Homework: Lab 3 DUE: Lab 2

Week 7 - Level, Environment and UI Design

Tuesday 2/24 - Level Design Demo

- Area2D Review
- CollisionShapes
- StaticBody
- RigidBody
- Assets
  - Sprite Sheets
  - Where to find assets

Friday 2/27 - Level Design Workshop

- Review
  - CollisionShapes
  - StaticBody
  - RigidBody
- CharacterBody
- Tilemaps

DUE: Lab 3 ## Week 8 - Project Development/Playtesting ### Tuesday 3/3 - Patterns

- 2D Components and Polish
  - Common Patterns: Items, Enemies, Checkpoints, Respawns, Killboxes
  - User Interface (Control Nodes)
  - Polish: Sound, Lighting, Particles
- Project Development

Friday 3/6 - CLASS CANCELLED

- **Asynchronous project work day**
- Continue 2D game development independently
- Optional: Post questions/progress in class Discord/forum

Week 9 - Spring Break!

Week 10 - Project Development

Tuesday 3/17

- Project Development

Friday 3/20

- Playtesting day! **DUE: 2D Game** ## Week 11 - Hello 3D

Tuesday 3/24

- Capstone Brainstorm
- Hello 3D

Homework: Lab 4 Homework: Capstone Game Homework: Capstone Presentation

Friday 3/27

- Materials, Models
- Light, Sound

Week 12 - Advanced Topics and Capstone Presentations

Tuesday 3/31

- Animated Characters
- Classes, Resources
- Debugging
- NPCs

DUE: Lab 4

Friday 4/3 -Easter

Week 13 - Capstone Presentations and Review

Tuesday 4/7

- **Capstone Presentations**

Friday 4/10

- **Capstone Presentations**
- Exporting
- Review

Week 14 - Playtesting

Tuesday 4/14

- Project Development

Friday 4/17

- Project Development

Week 15 - Final Projects

Tuesday 4/21

- **Final project playtest**

DUE: Game Review

Friday 4/24

- Preparing for the Game Industry: Portfolio and Career Paths
- Playtest party!

Finals Week

TBD - Final Exam Period

- **DUE: Capstone Project**

Necessary Materials:

- Godot 4.5 : An open source 2D, 3D and XR game engine.
- Github Desktop: an industry standard version control system

Resources and Tutorials

- Video tutorial on Github and Godot
- Introduction to Coding
- Conditionals and Input
- 9 Ways to Actually Get Game Dev Done On Time
- Godot Resources
- Where do game ideas come from

Godot

- GDScript Cheat Sheet
- Source Code
- Docs

- Demo Projects
- Forums
- Godot Discord
- Learn GDScript From Zero
- **TUTORIALS**

Brackeys

- How to make a video game in Godot
- GDScript in 1 Hour
- How to make 3D Games in Godot
- Lighting in Godot

Git & Github

- Dan Shiffman's Github for Poets

Instructor Details

John Bezark (they/them) is a Brooklyn based Game Designer, Creative Technologist, Immersive Experience Designer and Video Artist. They graduated from NYU's ITP with an MPS in Interactive Telecommunications and from Fordham University with a BA in Theatrical Directing. John has made everything from Solar Powered Websites to Immersive Game-shows about Systems Thinking.

Nowadays they like to use the Godot Game Engine to create one of a kind immersive and interactive experiences, games and performance art.

When not creating weird things, John also really likes to work in education and he's passionate about teaching others how to design immersive spaces, how to make games and how to see the world through the lens of Systems Thinking.

Email: jbezark@fordham.edu Portfolio

Office Hours: Thursday 1-5pm. Book here