# DD275

## Foundations of Game Design

**Your Instructor:**
Anthony McClain
He/Him
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**Office Hours:**
Meetings by Appointment Only
Contact me through Discord or Email
*Canvas Messages will only be answered during school hours.*

**Your Section:**
DD275-105
Mondays 6:00 PM to 8:50 PM

Room Number 236H

### Course Description:

"A *guided exploration through the world of games. Students will experiment, play, and analyze various aspects of games - from early traditional games to current generation electronically-mediated games; from individual games to collaborative online games. Game types will be analyzed with particular attention paid to the virtual environments in which these games take place. The expressive and persuasive aspects of games will also be explored.*"

### Learning Objectives:

"*Provide an exposure to video game development in history. Analyze and execute industry-level techniques to create original ideas and prototypes for video game production. Obtain problem-solving skills and adaptability for working in a studio environment, and reflect on the hurdles encountered by other successful game developers. Finally, acknowledge and apply the feedback and knowledge you've acquired to develop a meaningful product.*

# What is this course?

This course will cover the history of video game development and how the industry has changed (and *continues* to change!) with time. This will include studying successes, failures, and the ongoing adaptations of both design philosophy and practices of game design. By studying the development of existing games, we can then put into practice the lessons learned over the years by generations of talented and passionate individuals who came before us.

## Research!

You will be tasked with deep-diving into games of your choice and those selected by the professor. You should be able to explain what does and doesn't work about a given system or mechanic, how the game makes you feel, as well as be informed about how the game was made. Who made it? How many people were involved? How long did it take? Did it leave a lasting impression on the industry?

I want you to *care* about the research that you will do in this class, so you should ideally talk about games that YOU personally enjoy. If you haven't played many and find yourself stuck, talk to me and we can figure one out together.

## Discuss!

The bulk of our time together will be spent discussing, brainstorming, and dissecting the topics we'll be covering throughout the semester. When you say you love a game, why? What about that game did you enjoy, and why did you like it? What makes a game "work," and what about that game "doesn't work?" By putting these topics under scrutiny, we can develop a further understanding of how they operate and impact our own ideas or workflows.

## Implement!

Once we establish what "works" and "doesn't work" — what's *fun* and what's not — we need to put the theory into practice. You will be tasked with coming up with your own ideas and pitches for a game you would want to make, and bringing those ideas to life through documentation, experimentation, and prototyping.

# What can I expect to learn?

By the end of this course, you will:

1. Understand the cycle of game development and how ideas become reality.
2. Examine emerging trends and technologies in game development.
3. Identify common practices and pitfalls when designing games
4. Recognize the extent of research and promotion performed by studios when designing and releasing games onto various platforms.
5. Create (and build upon) your own game concepts, ideas, and mechanics with your peers.
6. Apply the Mechanics / Dynamics / Aesthetic approach to designing your game.
7. Produce thorough documentation and prototypes for your ideas.
8. Demonstrate the ability to adapt to your audience, your team, your environment, and your available resources.
9. Evaluate feedback and distinguish positive, negative, and constructive criticism from your audience.
10. Reflect on what it takes to actually develop a game to completion, to understand the complexity and depth needed to succeed as a developer.

# What resources do I need?

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This course does not require any specific software or textbooks. You will be provided with any assignment-specific resources in class and will be tasked with fetching information for your topics on your own.

**However, to properly participate, you should have the following:**

- A laptop, tablet, or smartphone. (Our lab will have desktops as well!)
- A notebook, sketchbook, or ideally both
- Pens/pencils/markers/etc.
- A willingness to engage with and discuss the topics at hand with your peers!!

For communicating outside of class, I will be creating a Discord server for us to use. This is my preferred method of contact as it alerts me immediately and is easily accessible on all platforms. I will also be utilizing Discord on top of Canvas for providing resources, links to important content, schedule reminders, etc. Though you are not **required** to join, I cannot overstress that you SHOULD join, as not doing so will only serve as a detriment to you. You can join the Discord via this invite link:

<insert link>

**Additionally,**
You are responsible for your own work. Though you will be working together with your peers throughout this semester, each of you will be graded individually based on your participation and engagement with the assignments. “Lazy” team members who expect to be carried through the course by their group will *not be tolerated.* If you are having difficulties with your classmates, please contact me immediately to have it resolved.

# How will I be graded?

Our assignments will be very open-ended, and the deliverables will vary heavily from student to student and group to group. However, all students are expected to submit diligent, timely work for each assignment. You must put thought, effort, and care into your assignments to be successful. It will be obvious if you have rushed your work

If you need assistance from your professor, please reach out to them through their preferred channels. However, *do not* expect your professor to respond to you late at night, early in the morning, or immediately before class on a due date. We are people too, and expect you to abide by a reasonable schedule. What constitutes a "reasonable schedule" will be established by your professor for your specific section.

## Attendance is mandatory.

Attendance is an explicitly mandatory component of ALL on-campus classes for ALL students in the School of Art + Design (see Attendance). Frequently missing class will heavily impact your final grade, as well as detracting from the quality of your work and your understanding of course material. If you are absent, it is your responsibility to catch up promptly with the class by reviewing pertinent documentation and requesting classmates to review the material with you. Do not expect the instructor to repeat the demonstrations and lectures you missed or spend hours tutoring you privately. Be sure, however, to ask for any handouts or assignments you may have missed.

If you feel as though you are falling behind, not working well with your peers, or struggling with course content or other expectations, **please contact me immediately.**

Evaluation and grades are determined based on the following considerations:

**Grade weight**

Assignment 1: 10%
Assignment 2: 10%
Assignment 3: 20%
Assignment 4: 20%
Assignment 5: 25%
Professionalism / Participation: 15%

Total: 100%

**Grading scheme**

A = 93-100%
B+ = 87-93%
B = 80-87%
C+ = 75-80%
C = 70-75%
D = 60-70%
F = below 60%

"Professionalism and Participation" refers to the degree of seriousness, immersion, and commitment you bring to your work.

By its very nature, professionalism includes:

1. Consistently meeting deadlines.
2. Submitting completed work.
3. General time management.
4. Commencing work on a project as soon as it is assigned.
5. Seeking feedback on your work to incorporate needed adjustments and improvements.
6. Following instructions *promptly*.
7. Attendance at all classes – on time and until the scheduled end time.
8. Timely, if not redoubled, effort to catch up on any missed instruction.
9. Demonstrating leadership, cooperation with others, and *providing* constructive feedback to your peers.

This class is fundamentally about participating in collaborative learning. If you choose to remain silent during class hours and disengage from the media, you will be graded accordingly.

Each assignment will be evaluated using the following criteria:

- Planning & Research
- Creativity & initiative
- Technical quality
- Adherence to project guidelines

Values of quality, aesthetics, taste, etc., are based upon the instructor's judgment of the work produced, the effort employed, and the total result achieved. For running projects, you will not only be graded on the final product, but the *progress* that you have reported throughout the semester.

To receive full credit, all assignments are due on time. Most often, submissions will be accepted up to one class after the due date for a reduced letter grade. Work handed in after that will not be accepted and will be worthy of a zero for that assignment. However, it is almost *always* favorable to submit a completed assignment late than an incomplete assignment on time.

A full and detailed rubric with specific expectations will be provided with each assignment.

## Digital Design Submission Requirements & Portfolio Considerations

SIGGRAPH's annual conference includes the Faculty Submitted Student Work Exhibit. This is a double-curated exhibit seen by many professionals at the biggest computer graphics conference. Submitted work must be conceived, designed, and created by the student. While using the latest tools to enhance a design or speed a process is encouraged, the focus of any visual narrative must be original. Should their work be accepted, students can add this accomplishment to their résumé and include the selection laurels in their portfolio. To have their work considered, students must complete and return a signed version of the provided FERPA form. Final work must also be at HD resolution (16:9): 1280 x 720 or 1920 x 1080.

## Withdrawals

Students sometimes need to withdraw from a class due to personal or academic reasons. Click here for deadline dates. Please contact me before withdrawing.

# Decorum

In this course, we must be respectful to all in attendance. Students from all backgrounds and perspectives are to be well-served by this course. The diversity students bring to this class is an asset. Your suggestions are encouraged and appreciated, as we wouldn't have a course without them.

Our class revolves around the many opportunities for lively discussion, analysis, and debate. However, there will be no place for rude or derogatory remarks. When you speak, you must speak respectfully of all people – especially your peers and your instructor.

Your peer's opinions and work are neither "good" nor "bad". You do not simply "like" or "dislike" something. We are trying to decipher what *works* and what *does not work*. If you "like" something, it probably "works," and if so, ***why?*** When offering feedback to your peers, you MUST explain the "why!"

I can also make an appointment to meet with you at a time outside of class that is convenient for you. Please do not hesitate to contact me if you are having trouble or need help.

Students with documented disabilities need to inform the instructor during the first week of the semester to receive appropriate accommodations. Any chronic or permanent disability for which accommodations may be required – whether taken or not by the student – must be documented with, and confirmed by, the NJIT Office of Student Disability Services. (Students are not required to avail themselves of any accommodations to which they are entitled.) Temporary disabilities that are obvious (e.g., broken arm) may be assessed by the instructor but should still be documented with the Dean of Students. Accommodations sought after the start of the semester will only be offered to students in those instances where the disabilities are diagnosed or have the first instance of occurrence during the semester. No retroactive accommodations are available.

# Academic Integrity

## Cheating, Plagiarism, and Dishonesty

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree you are working towards. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found in NJIT Academic Integrity Code.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students' Office. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the Code of Academic Integrity, please contact the Dean of Students' Office at dos@njit.edu

## Generative AI

NJIT as an institution maintains the position that instructors have the discretion to set their own preferences, including whether GenAI is permitted at all, under what conditions it may be used, and for which specific assignments it is permissible or not. In this class, the use of Generative AI tools is **strictly prohibited.** Using AI-generated text, imagery, or other content as referential material when developing ideas is tolerable, but **submitting any work that contains AI-generated content within the submitted material will result in a severe score penalty or complete failure for that assignment.** Work that is simply a manual recreation of AI-generated content will result in similar scoring. Remember, these are TOOLS and not replacements for your own (or your peers) abilities.

***You will not develop as a creator if you cannot create your own original work!!***

# Schedule

**This is subject to change.**

| Date | Proposed Schedule | Things Due |
|---|---|---|
| Sept. 8th | Welcome! Review the Syllabus, Introductions | |
| Sept. 15th | Discuss meaningful games & Intro to Assignment 1 | |
| Sept. 22nd | Present findings from Assignment 1, introduce Assignment 2 | Assignment 1 |
| Sept. 29th | Game and Watch / Handheld Game Development discussion | |
| Oct. 6th | Introduction to Game Design: compare L4D2 to B4B. Establish studio groups. Introduce Assignment 3 | Assignment 2 |
| Oct. 13th | No Class due to Columbus Day | |
| Oct. 20th | Review design doc progress. Stress-test existing documentation with questions! | |
| Oct. 27th | Present and discuss each group's pitch to the class for critique. | Assignment 3* |
| Nov 3rd | Discuss marketing, early access, and audience building. Introducing the final assignments. | |

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| Nov 10th | Discuss “finding the fun” and scope changes. What happens if the original idea isn’t fun in execution? | |
| Nov 17th | Class Critique of progress, created assets, and changes made since original pitches before break. | Assignment 4 |
| Nov. 24th | Discuss trends and “genre waves.” (Battle Royales, Platformers, Turn-Based) Progress Check-in. | |
| Dec 1st | Final Check-Ins. Play the prototypes! Last-minute feedback for final changes. | Assignment 5 |
| Dec. 8th | Reflect on what students learned, how their perceptions have changed. Celebrate completed prototypes. | |