

IT 286: Foundations of Game Production
Fall 2024

Instructor: Erin J.K. Truesdell

Meeting Times: Mon/Wed 8:30 AM - 9:50 AM

Email: erin.truesdell@njit.edu

Office Hours: By appointment (<https://bit.ly/it-286>)

Location: GITC 3200

Course Site: <https://njit.instructure.com/courses/43188>

Course Description

Prerequisites: CS 100 or CS 101 or CS 103 or CS 104 or CS 106 or CS 113 or CS 115 or BNFO 135. This class introduces students to many of the tools and design methodologies needed for electronic game production. This class will focus heavily on scripting, level design and content control as applied to game development. Students will learn an industry standard game engine and its tool chain. Students will work on projects to develop the levels, controls and scripts in order to create a new game experience with a professional game.

Learning Objectives

Students who successfully complete this course will:

- Ideate a concept for a new game and iterate on its design
- Work in a small team of 3-6 students to complete playable demos and a final game submission
- Engage in discussion and critique of other class projects from design and technical standpoints
- Demonstrate proficiency working in groups and using project management software
- Demonstrate proficiency in multiple core game engine functionalities taught in the course
- Produce a playable and well-documented game beta

Materials

There are no required textbooks for this course. Students should have access to a computer capable of running Unity Engine, preferably a laptop that may be brought to class. We will be using Unity 2022 LTS in class. Student teams are welcome to use other versions of Unity for their projects.

Course Schedule

Subject to change at the instructor's discretion. Any changes will be announced via Canvas.

Date	Topic	Due By Class Time	PPJ
9/4/2024	Syllabus overview, team formation, game design intro		
9/9/2024	Game design and brainstorming		
9/11/2024	Planning and managing your project	Team Brainstorm Report & Contract Draft	Due
9/16/2024*	Project Pitches/Critique	Project Pitch Slides	
9/18/2024	Project Setup		
9/23/2024	Team meetings with Dr. Truesdell		
9/25/2024	Asset creation & integration	Final Project Contract	
9/30/2024	Scripting in Unity		
10/2/2024	Scripting in Unity		Due
10/7/2024	Scripting in Unity		
10/9/2024	Animation in Unity		Due
10/14/2024	TBD/Studio time	Personal Milestone 1	
10/16/2024	Pipelines & game-making ethics		Due
10/21/2024*	Alpha Build Presentations	Alpha Build	
10/23/2024	Playtesting		Due
10/28/2024	Studio time		
10/30/2024	UI		Due
11/4/2024	Team check-ins with Dr. Truesdell	Personal Milestone 2	
11/6/2024	UI		Due
11/11/2024	TBD/Studio time	Playtest Report 1	
11/13/2024	Advanced topics in Unity		Due
11/18/2024*	Beta build presentations	Beta Build	
11/20/2024	Presenting your work		Due

11/25/2024	Studio time	Playtest Report 2	
12/2/2024	Advanced topics in Unity (TBD)		Due
12/4/2024	Studio time		
12/9/2024	Building & exporting/Studio time	Personal Milestone 3	Due
12/11/2024	Studio time		
TBD	Final Presentations	All Final Submission Materials (see Canvas)	Final

Requirements and Grading

Assessment	Percent of final grade
Team Contract	5%
PPJs	15%
Personal Milestones (3)	20%
Playtest Reports (2)	5%
Alpha Build/Presentation/Critique	15%
Beta Build/Presentation/Critique	15%
Final Submission Build/Presentation/Critique	25%
Total	100%

Attendance and Participation

Class attendance is not required except on presentation/critique days (marked with a * in the course calendar), where it is important that you are present to give and receive feedback among your classmates. On these days, I will be taking attendance; non-participating students will be marked absent. Any student absent without an excuse from the Dean of Students will not receive credit for the presentation/critique portion of their grade. It is *highly recommended* that students attend all lecture sessions, as these course periods will include vital instruction about core elements of graded material.

Sharing of Work

Participation in the course implies permission for sharing work with others in the class and with future students if your work is judged to be a good example. If you are not comfortable with this, please let me know. Unless I am informed by you in writing (email) that you do not want your work shared with others in the context of current and future versions of this course, I will assume that it is available.

Course Policies

- **Authorship Policy:** Students are expected to indicate the source and authorship of any work not original to them, including copyrighted work or work of classmates, friends, outside collaborators, or other practitioners.
- **Late Work Policy: Work is due at class time on the due date.** Work submitted late will receive a 10-point deduction for each day it is late. Late work will be given a 0 after 10 days. Each student may submit **one** PPJ up to 24 hours late with no penalty.
- **Email Policy:** All emails related to the course should include the course number in the subject line and detail any steps you have already taken to resolve the problem you are emailing about.
- **Office Hours:** My office hours are available via Calendly at the link at the top of the syllabus. I encourage you to schedule a time to come by if you have questions, are struggling with anything, or just want to chat about making games! If none of the posted times work for you but you'd still like to chat, please email me and we can coordinate a time to sit down and talk.
- **Technology Policy:** You are encouraged to bring a laptop, tablet, etc. to class and use it to interact with and supplement class activities and lectures. You are expected not to use technology in a way that is disruptive to other students' learning and the overall classroom environment.
- **Courtesy & Professionalism:** Students are expected to conduct themselves professionally during all interactions related to the course. This includes in-class group work and critiques, email and Canvas communications, and interactions with classmates and the instructor. There is zero tolerance for discrimination or harassment on any basis, including but not limited to race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. Violation of any of these expectations will result in appropriate penalties, including but not limited to reduction of grade, rescinding of lab access, or disciplinary action.

Statement on Equity and Inclusion

It is my intention that this classroom is a safe, welcoming, and educational space for all students in the course, and I strive to implement class policies and practices that support this goal. To this end, I uphold a zero tolerance policy for discrimination or harassment on any basis, including but not limited to race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We may also cover topics such as equity and ethics in game-making practices during class; as game developers, we have the opportunity to create new things that can improve the world or even just make it a little more playful. This means we have a responsibility to uphold strong ethical principles in not only what we make, but in how we make it. Respect for your teammates and classmates is *imperative* in this process, and I expect all of you to strive to help your classroom community in this way.

Commitment to equity and inclusion is a commitment to humility and a constant process of listening and improvement. If you have something you'd like to discuss with me (whether this be class content, team conversations, or something else) that can help me best support the identities of all class members, please do reach out via email or in office hours (All conversations will be kept confidential to the best of my ability). Ongoing conversations and learning will help all of us, and future students, feel welcome and encouraged in the classroom and team project setting.

Information for Students with Disabilities

Students with disabilities who require course accommodations or who wish to seek support may contact the Office of Accessibility Resources and Services (OARS). More information is available at <https://www.njit.edu/accessibility/>

Writing and Speaking Support

Students who wish to seek support and programming for writing and speaking skills are able to take advantage of resources available through the NJIT Writing Center. More information is available at <https://www.njit.edu/writingcenter/>.

Honor Code Statement

All students are expected to adhere to the University Policy on Academic Integrity, which can be found [here](#).

CREDIT WHERE CREDIT IS DUE: Most of the policies in this syllabus have been adapted from Dr. Anne Sullivan's.