CSI 104 - Introduction to Game Design – FALL 2022

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Office Hours: Drop-in or make an appointment
Discord: `https://discord.gg/94VUrxj`
Class meetings: CSI 104 – TR 2:30-3:45
Recommended Text: The Art of Game Design by Jesse Schell
Web: `http://shaunramsey.com/class/22SPRING/104.html`

Overview and Advising: Game Design will focus on many aspects of game development. In this course, we will first learn to break down games into fundamental pieces. Along the way we will be building the tools to develop game ideas and pitch games of our own. We will construct working game development documents, work on prototypes and eventually demonstrate our games. Then, we'll iterate on this process and also begin using a simple code framework to write some of our own games. For those interested in diving deeper into building games, the tools will use depend on the aspect of game development that you like. Unity is free and it has many tutorials and is the default entry to game design (more on that below). Blender is free and is used by professional artists. The 'abstract' design tools applied in this class can be applied to board game design, card game design, video game design, and many kinds of storytelling. Iteration is encouraged and enforced throughout the structure of the class and the group work is heavily encourage and given heavy incentives. Many indie developers do not operate completely alone even if in a "single developer" company. This class does not require prior programming experience.

Grading and General Information: The points breakdown is listed below along with a brief description of how you'll accumulate these points and what we'll work on. If you're interested in making games part of your career, you'll also find that information below.

Points Breakdown:

Category	Points (pts)
Journal Hand-ins:	300 pts
Peer Review Work	200 pts
In-class Group-Work:	100 pts
Non-digital Game Hand-Ins	300 pts
Ren'Py Project Hand-Ins	400 pts
Video Game Hand-ins/Presentation	100 pts

In-class Discussions, Peer Review, and Presentations: We will regularly explore topics as groups in the class. Each group member has a different role for the group and you will have an opportunity to present. Presentation and Reporter days contribute to your points. Everyone will peer review one another's work regularly.

Journals (and Lenses): These journals will be used to explore game design ideas and to help us think about different ways of examining and experiencing games that we may design. Journals are checked for completeness and thorough exploration of the prompts rather than 'correctness' or grammar. Be sure to put some actual time into developing your answers. The journals are your foray into game design and there are no wrong answers. However, there may be "incomplete" answers that I ask you to expand upon for full credit.

Visual Novels (via Ren'Py): In this class you will experience small bits of coding through the development of a visual novel or a visual novel-like game. While this only scratches the surface of a full game development engineer's job, it can help you understand which part of the game design process you enjoy and would like to learn more about. We will learn more about the different aspects and avenues of being in game development in this course. We will have several hand-ins with increasingly complex requirements that demonstrate your development of small code and design aspects. Those with prior programming experience will find your efforts in Ren'Py to be rudimentary. I encourage you to apply your skills to make things more interesting (see Your grade below).

Games without the digital: The CEO of a small game company once told me, "we keep a lot of board games on standby and we keep a game room because they serve as inspiration for design in both story and mechanics." As such, we will begin our foray into development largely by thinking of games that do not have a digital component. Loosely, these are called board games, even if they do not have a board (some have only dice or cards). In groups we will develop, prototype, and write rules for non-digital games and explore that avenue of game design.

Your grade: Many aspects of this class are graded on a "completion" basis. This means that your grade in this course is largely centered around "did you do the thing." This also means that "you get out what you put in" heavily applies in this course. If you are not ready to invest into the course with plenty of iteration, sharing, development, and design of ideas, then it is best to swap this class for another. We will be digging at our own work and others work.

Life in a Game Development Company: If you've ever wondered why you want a liberal arts backgrounds, games will certainly bring it to the forefront. Strong communication skills are required in most game companies. For students certainly interested in working for a game development company I've been in contact with several and they recommend a few key things that are important to at least attempt. For everyone, it is clear that you should jump into unity and do a few tutorials. This applies to everyone who might end up working at a company. In prior iterations of this course, I required unity installs tutorials and development. For this iteration I will not, but I highly encourage it for anybody who is serious about looking into game design. It is a tool used by MANY game development professionals and will give you a giant leg up in getting into the industry if you gain some proficiency in this FREE software package.

Developers: For those who intend to be game development "engineers" or quality assurance, I highly suggest you think about a computer science major. But to increase your specific game dev chops, then digging into C# and applying that in different ways within

unity makes sense. Quality assurance (QA) is also getting more technical, now more than ever. Depending on the size of the company will determine the depth of technical experience required for a QA position.

Artists: If you think you might want to be an artist at a game company, then download blender and learn the ins and outs of 3d animation and modeling. This will be important. This includes modeling, rigging, skinning, animating and more. Most artists in the industry use cintique/ipad or similar tablets for drawing and while expensive, I have yet to see a professional artist without one and the skills to use it. Photoshop chops are also useful. Gimp is free and a photoshop 'clone' of sorts. I suggest finding a few projects and seeing where you get. But, what's great about blender, gimp, and unity is that they are free. You can literally work on your chops and develop a game portfolio without anything more than a computer.

Technical Experts: Whether it is Information Technology (IT) or otherwise, someone must keep the technical components of the company up and running. Keep existing licenses intact and otherwise make sure the company is running smoothly. As you scan the list of folks working at game companies, it should quickly become apparent that central source for this knowledge and assistance is invaluable. Sometimes these folks usually come from CS-like backgrounds, but often they're CS -adjacent in many ways. Maybe they didn't enjoy programming or just loved working on hardware problems while a CS student. Or maybe not a CS student at all. Someone with an attention to detail and a willingness to learn and debug technical problems might find themselves as an IT specialist.

Writers/Designers: The design group of most game companies employs writers and folks who like to think creatively about where to take an existing game or how to plot a new game and throw it out there in the world to be successful. These folks may be board game enthusiasts, creative writers, or game mechanic gurus or even something else.

Data/Stats: Data is another aspect of game companies (and most companies) these days. Experience with data science and statistics is huge and many game companies have a data analytics department that helps dig into the volume of data available in the production, progression and maintenance of a game (or other software).

Producers: There are many other jobs at game companies too. If you love communicating and working with a diverse group of folks, then producers at game companies are of this brand. It often does not require deep technical skills and will involve many personal interactions and communication.

Company Size: Smaller game companies will want you to be a generalist with tools. Bigger companies will want you to be a specialist most of the time. As an animator, you could focus on "just" rigging at a big company, for example, but at a small company you might rig and animate all the models. Some 'animation' programs (degrees or otherwise) will force their artists to specialize in one area to land a job at some of these big companies.

Grading Notes: The non-digital group project will have some interesting grading schemes. I will assign you and your project a grade as per usual. However, your group will also assign one another grades as well as assign your group, as a whole, a grade. Your grade will then become a combination of these. You will give a self reflection and a description for these decisions as you do so. In the end, I do reserve the right to change these grades as the faculty of the course, but I hope your honest reflections will resolve into natural grades for

this portion of your grade.

You should be able to look at your current grade at any time using canvas.

There will be an assignment due at the end of every Thursday. Roughly half the time these are journals and the other half are project hand-ins. Journals should be typed and roughly 250 words unless otherwise noted. The point is to be thoughtful and introspective. Answer the journal prompt thoroughly, but ultimately I want to see actual thought put into these topics. It is about more than just getting through a prompt or filling out a grade. These should be about your own self development, thoughts, introspection and journey. Journals should be submitted as pdf. In my version of word, you can go to "File" menu and then "Export" and it will allow you to create a PDF from your existing document.

There are several threads of design and iteration in this course. Pieces will run in parallel and can inform and reflect on another, but they may not necessarily do so directly.

Attendance: Attendance is strongly encouraged and will be tracked.

Lateness: I reserve the right to give any late assignment a score of 0.

Accommodations: If you have an accommodation that has been reported to the college, please let me know as soon as possible so I can work to meet your accommodation. Please notify me of any necessary accommodation at least two weeks prior to the requirement so we can make it happen. If you suspect you might need an accommodation, I recommend that you speak with OAS as soon as possible.

Academic Honesty: You are always subject to the Honor Code of Washington College. All work must be your own. When handing in any assignment you are required to cite every reference, including web pages and your friends. Failure to do so will be considered plagiarism and subject to be reported to the honor board.

Career Center: It is important to utilize all the resources available to you. The Career Center is a wonderful center dedicated to helping you. You can receive mock interviews there, attend a career fair, and even attend a workshop on graduate school admissions. For more information on these programs and other ways to connect with the Center for Career Development, please contact Nanette Cooley at ncooley2@washcoll.edu.

Quantitative Skills Center: The QSC has drop-in hours for CS classes a couple times a week. Hours are pending. While many will not have worked directly in our platform, our use cases are something they can definitely assist with! And they can help you with all your number needs! Struggling in a class with numbers? Want to check over your work before handing it in? Just like working with a knowledgeable tutor nearby? Then the QSC is for you! The Quantitative Skills Center is a tutoring service provided to all members of the Washington College community. Even though we may be apart this semester, we are still here to help. Consider making a virtual one-on-one appointment. For more information and to view a brief video guide, visit our website. Appointments need to be reserved two days in advance, so be sure to think ahead! To make appointments go here: `https://washcoll.mywconline.com/`

Counseling Center: We all experience stressful and difficult events as a normal part of life and especially right now. As your instructor, I am not qualified to serve as a counselor, but I am a useful ear. So please feel welcome to open a discourse with me. I may guide you to a counselor and if you do need an actual counselor, Washington College offers counseling services on-campus that are available to you at no cost. All counseling services provided are completely confidential and in no way connected to your academic record. I strongly encourage you to take advantage of this valuable resource. Please contact The Office of Counseling Services at 410-778-7261, or email: vanderson2@washcoll.edu to schedule an appointment.

General Due Date and Tentative Schedule:

WEEK	TOPICS	HAND-IN (Due End of Thrs)
Week 1	Toxicity	Toxicity and no class Thursday
Week 2	Ren'Py, Design Elements and Tools	Ren'Py First
Week 3	AR/VR and Games	Diversity of Environments
Week 4	Non-Digital Games and Brainstorm	Game Development Brainstorm
Week 5	Video Game Genres and Work	Group Game Idea and Rules
Week 6	Rules Exchange and Work	Full Group Game
Week 7	Play/Rotation	Nothing due, no class Thursday
Week 8	Play/Rotation - (Inter)Action Thry	Full Game Grade
Week 9	Play(er) Planes/Types - D+ Values	Video Game idea
Week 10	Game Company and Work	Ren'Py Part 2
Week 11	Ren'Py Reviews and Catch-up Day	Lenses and Ren'Py Responses
Week 12	Ren'Py Demo and Brainstorm	Video Game Paper Prototype
Week 13	Paper Prototype Peer Review	nothing due, no class Thursday
Week 14	10-page Pitch and Work	Ren'Py 3 - The Final Handin
Week 15	Presentations	Video Game Pitch and Design

Note: This document and other materials are available from the website listed above.