

CSC404: Video Game Design

Course topics include: game history & genres, “ludology” (theory of fun, story creation, optimal experience), character and level design, industry tools & processes, graphics & animation, modeling techniques, collision detection, visual effects, scripting (passive & active), HCI & interface design, verification & playtesting, business of gaming. Material & projects based on real-world processes.

Instructor Information

Name	Video	Email
Steve Engels	https://utoronto.zoom.us/j/5546086241 Passcode: 112358	sengels@cs.toronto.edu (please put “404” in subject heading)
Emma Westecott	https://ocadu.zoom.us/j/89388655668 Passcode: 4?d+CVG0	ewestecott@ocadu.ca
Mason Victoria	https://us02web.zoom.us/j/81746267457 Passcode: 684397	mason.victoria@utoronto.ca

Course Schedule

Lecture (Tu 1pm-3pm)	Tutorial (Th 1pm-2pm)	Deliverables
Jan 6 @ 1pm ⇒ Course Intro, Idea Creation	Jan 8 @ 2pm ⇒ Ludology, part 1	Game Jam Assignment 1 – Jan 10
Jan 13 @ 1pm ⇒ Ludology, part 2	Jan 15 @ 2pm ⇒ Game Pitch Prep	Idea Submissions – noon, Jan 12 Game Jam Assignment 2 – Jan 17
Jan 20 @ 1pm ⇒ Game Pitch Presentations	Jan 22 @ 2pm ⇒ Character Design	Creative Brief – Jan 23
Jan 27 @ 1pm ⇒ Level Design	Jan 29 @ 2pm ⇒ Design Doc Prep	Tech Proof-of-Concept – Jan 30
Feb 3 @ 1pm ⇒ Design Presentation	Feb 5 @ 2pm ⇒ Project Management	Design Document – Feb 6
Feb 10 @ 1pm ⇒ UI/UX Design	Feb 12 @ 2pm ⇒ Game Design Research 1	Level Prototype – Feb 13
Reading Week		
Feb 24 @ 1pm ⇒ Alpha Demo Presentation	Feb 26 @ 2pm ⇒ Prototyping & Playtesting	Playable Prototype – Feb 27
Mar 3 @ 1pm ⇒ Ludology, part 3	Mar 5 @ 2pm ⇒ Playtesting Report	
Mar 10 @ 1pm ⇒ Playtest Demo	Mar 12 @ 2pm ⇒ Beta Presentation Prep	Playtesting Demo Industry Playtest Session – Mar 12
Mar 17 @ 1pm ⇒ Beta Presentation	Mar 19 @ 2pm ⇒ Game Design Research 2	Beta Release & Playtest Report – Mar 20
Mar 24 @ 1pm ⇒ AI for Games	Mar 26 @ 2pm ⇒ Monetization & Metrics	
Mar 31 @ 1pm ⇒ TBD	Apr 2 @ 2pm ⇒ TBD	Final Build & Deliverables – Apr 3 Final Industry Demo – Apr 2
		Level Up Showcase – Apr 7

Course Materials

- **Web Page:** Quercus (itch.io for milestone submissions)
- **Discord:** <https://discord.gg/vHeghQrTaY>
- **TA Contact:** 404ta@cs.utoronto.ca
- **Suggested Text:** Rabin, Steve. *Introduction to Game Development*, Charles River Media.

Course Deliverables

Note: For milestone presentations, half of the groups present in the OCADU lecture (Wed 11:50-2:50).

Game Jam Assignments	5% each (10% total)
<ul style="list-style-type: none">• One-day hackathon events (one at UofT, one at OCADU).	
Game Ideas	3%
<ul style="list-style-type: none">• Submitting ideas for potential games for the project.	
Milestone #1: Game Pitch & Creative Brief	5% & 3%
<ul style="list-style-type: none">• Present main game idea and how it targets the theme and the audience.• Describe game mechanics, secret ingredients, and what a completed final product will look like.• Submit: Creative brief document	
Milestone #2: Design Presentation & Design Document	5% & 10%
<ul style="list-style-type: none">• Present all pre-coding design details of the final game, including character designs, level designs, storyboards, team & task breakdown, etc. Also includes tech proof-of-concept (presentation).• Submit: Design document	
Milestone #3: Game Alpha	10%
<ul style="list-style-type: none">• In-class demo of playable prototype.• Describe plans for upcoming sprints and goals for final product.• Submit: Game demo on itch page	
Milestone #4: Beta Release & Playtesting Report	10% & 5%
<ul style="list-style-type: none">• In-class demo of completed product, and playtesting results.• Submit: Playtesting report	
Milestone #5: Final Demo & Submissions	10% & 5%
<ul style="list-style-type: none">• Testing & evaluation at Zynga playtest event• Submit: Final game, video trailer, peer evaluation	
Tech Demo, Tutorial Level, Playtest Demos	3% each (9% total)
<ul style="list-style-type: none">• Demos of intermediate stages of game between milestones.	
Itch.io page	5%
<ul style="list-style-type: none">• A development journal outlining your group's weekly plans, progress and challenges.	
Participation	10%
<ul style="list-style-type: none">• Participating in class, presentation feedback, playtesting sessions, Ludology seminar, etc.	

Peer Evaluations

This course uses peer evaluations to inform adjustments to your final project mark. As a result, the mark that you receive for your project is contingent on your active and equal contribution to the milestones and your group. The peer evaluations are a measure of the quantity and quality of your contributions, and inform us to potential adjustments that might be necessary.

At the end of the course, we ask everyone in the class to provide peer evaluations of their group members (including themselves). If a group member performs above expectations, a multiplier is applied that can increase their project mark by up to 15%. If a group member's contribution is negative or absent, the multiplier will reduce their project mark (by no more than 15%, except in extreme cases).

Serious negative evaluations will involve a follow-up discussion with the course instructor.

Lecture Recordings Policy

Recorded lectures for this course are hosted on the course YouTube channel:

- <https://www.youtube.com/playlist?list=PLNb2ynmgQVX2FEqdI4i9m3ExC0F4o9bxL>

Online lectures & tutorials for this course (including your participation) may be recorded on video and be available to students in the course for viewing remotely and after each session. Course videos and materials from this semester and previous semesters belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright.

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