

# 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	<a href="https://utoronto.zoom.us/j/5546086241">https://utoronto.zoom.us/j/5546086241</a> Passcode: 112358	<a href="mailto:sengels@cs.toronto.edu">sengels@cs.toronto.edu</a> (please put “404” in subject heading)
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## Course Schedule

Lecture (Tu 1pm-3pm)	Tutorial (Th 10am-11am)	Deliverables
Jan 11 @ 1pm ⇒ Course Intro	Jan 13 @ 10am ⇒ Ludology, part 1	<b>Game Jam Assignment 1</b> – Jan 16
Jan 18 @ 1pm ⇒ Ludology, part 2	Jan 20 @ 10am ⇒ Game Pitch Prep	<b>Game Brainstorming</b> – Jan 18 <b>Game Jam Assignment 2</b> – Jan 23
Jan 25 @ 1pm ⇒ Game Pitch Presentations	Jan 27 @ 10am ⇒ Character Design	<b>Creative Brief</b> – Jan 29
Feb 1 @ 1pm ⇒ Level Design	Feb 3 @ 10am ⇒ Design Doc Prep	<b>Tech Proof-of-Concept</b> – Feb 5
Feb 8 @ 1pm ⇒ Design Doc Presentation	Feb 10 @ 10am ⇒ Game Design Research 1	<b>Design Document</b> – Feb 12
Feb 15 @ 1pm ⇒ UI/UX Design	Feb 17 @ 10am ⇒ Project Management	<b>Level Prototype</b> – Feb 18
<b>Reading Week</b>		
Mar 1 @ 1pm ⇒ Alpha Demo Presentation	Mar 3 @ 10am ⇒ Prototyping & Playtesting	<b>Playable Prototype</b> – Mar 4
Mar 8 @ 1pm ⇒ Ludology, part 3	Mar 10 @ 10am ⇒ Playtesting Report	
Mar 15 @ 1pm ⇒ Ubisoft Playtest?	Mar 17 @ 10am ⇒ Beta Presentation Prep	<b>Gameplay Playtesting</b>
Mar 22 @ 1pm ⇒ Beta Presentation	Mar 24 @ 10am ⇒ Game Design Research 2	<b>Updated Game Demo</b> – Mar 19 <b>Ubisoft Playtest Session</b> – Mar 18
Mar 29 @ 1pm ⇒ AI for Games	Mar 31 @ 10am ⇒ Monetization & Metrics	<b>Beta Release &amp; Playtest Report</b> – Mar 26
Apr 5 @ 1pm ⇒ TBD	Apr 7 @ 10am ⇒ TBD	<b>Tech/Music Build</b> - Apr 8
		<b>Uken/Gameloft Demo</b> – Apr 26 <b>Final Game Submission</b> – Apr 28

## Course Materials

- **Web Page:** Quercus (itch.io for milestone submissions)
- **Discord:** <https://discord.gg/PdRtesH7ca>
- **TA Contact:** [404ta@cs.utoronto.ca](mailto: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 (Fri 8:30-11:30).

<b>Game Jam Assignments</b>	<b>5% each (10% total)</b>
<ul style="list-style-type: none"><li>• One-day hackathon events (one at UofT, one at OCADU).</li></ul>	
<b>Game Brainstorming</b>	<b>3%</b>
<ul style="list-style-type: none"><li>• Submitting ideas for potential games for the project.</li></ul>	
<b>Milestone #1: Game Pitch &amp; Creative Brief</b>	<b>5% &amp; 2%</b>
<ul style="list-style-type: none"><li>• Present main game idea and how it targets the theme and the audience.</li><li>• Describe game mechanics, secret ingredients, and what a completed final product will look like.</li><li>• <b>Submit:</b> Creative brief document</li></ul>	
<b>Milestone #2: Design Presentation &amp; Design Document</b>	<b>5% &amp; 5%</b>
<ul style="list-style-type: none"><li>• Present all pre-coding design details of the final game, including mock-ups, storyboards, mood boards, sketches, data models, etc. Also includes tech proof-of-concept (presentation), and task breakdown (document)</li><li>• <b>Submit:</b> Design document</li></ul>	
<b>Milestone #3: Game Alpha</b>	<b>5%</b>
<ul style="list-style-type: none"><li>• In-class demo of playable prototype.</li><li>• Describe plans for upcoming sprints and goals for final product.</li><li>• <b>Submit:</b> Game demo on itch page</li></ul>	
<b>Milestone #4: Beta Release &amp; Playtesting Report</b>	<b>5% &amp; 5%</b>
<ul style="list-style-type: none"><li>• In-class demo of completed product, and playtesting results.</li><li>• <b>Submit:</b> Playtesting report</li></ul>	
<b>Milestone #5: Tech &amp; Music Complete Product</b>	<b>5%</b>
<ul style="list-style-type: none"><li>• Tech and music complete game, prepped for art team.</li><li>• Final reflections on development process and final product.</li></ul>	
<b>Final Milestone: Playtesting Demo &amp; Final Items</b>	<b>10% &amp; 5%</b>
<ul style="list-style-type: none"><li>• Testing &amp; evaluation at Uken/Gameloft/Zynga playtest event</li><li>• <b>Submit:</b> Final game, video trailer, peer evaluation</li></ul>	
<b>Tech Demo, Tutorial Level, Updated Game Demo</b>	<b>5% each (15% total)</b>
<ul style="list-style-type: none"><li>• Progress checks to demonstrate current state of game.</li></ul>	
<b>Itch.io page</b>	<b>10%</b>
<ul style="list-style-type: none"><li>• A development journal, outlining your group's weekly progress, challenges and setbacks.</li></ul>	
<b>Participation</b>	<b>10%</b>
<ul style="list-style-type: none"><li>• Participating in class, feedback on presentations, running playtesting sessions, etc.</li></ul>	

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