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

<table>
<thead>
<tr>
<th>Name</th>
<th>Video</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>Steve Engels</td>
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<td>Emma Westecott</td>
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</tr>
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<td>Mason Victoria</td>
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Course Schedule

<table>
<thead>
<tr>
<th>Lecture (Tu 1pm-3pm)</th>
<th>Tutorial (Th 10am-11am)</th>
<th>Deliverables</th>
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<tbody>
<tr>
<td>Jan 11 @ 1pm</td>
<td>Jan 13 @ 10am</td>
<td>Game Jam Assignment 1 – Jan 16</td>
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<tr>
<td>Course Intro</td>
<td>Ludology, part 1</td>
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<tr>
<td>Jan 18 @ 1pm</td>
<td>Jan 20 @ 10am</td>
<td>Game Brainstorming – Jan 18</td>
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<tr>
<td>Ludology, part 2</td>
<td>Game Pitch Prep</td>
<td>Game Jam Assignment 2 – Jan 23</td>
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<tr>
<td>Jan 25 @ 1pm</td>
<td>Jan 27 @ 10am</td>
<td>Creative Brief – Jan 29</td>
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<tr>
<td>Game Pitch Presentations</td>
<td>Character Design</td>
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<tr>
<td>Feb 1 @ 1pm</td>
<td>Feb 3 @ 10am</td>
<td>Tech Proof-of-Concept – Feb 5</td>
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<tr>
<td>Level Design</td>
<td>Design Doc Prep</td>
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<tr>
<td>Feb 8 @ 1pm</td>
<td>Feb 10 @ 10am</td>
<td>Design Document – Feb 12</td>
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<tr>
<td>Design Doc Presentation</td>
<td>Game Design Research 1</td>
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<tr>
<td>Feb 15 @ 1pm</td>
<td>Feb 17 @ 10am</td>
<td>Level Prototype – Feb 18</td>
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<tr>
<td>UI/UX Design</td>
<td>Project Management</td>
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Reading Week

| Mar 1 @ 1pm                              | Mar 3 @ 10am                                    | Playable Prototype – Mar 4                |
| Alpha Demo Presentation                   | Prototyping & Playtesting                       |                                           |
| Mar 8 @ 1pm                              | Mar 10 @ 10am                                   | Gameplay Playtesting                      |
| Ludology, part 3                         | Playtesting Report                              |                                           |
| Mar 15 @ 1pm                             | Mar 17 @ 10am                                   | Updated Game Demo – Mar 19                |
| Ubisoft Playtest?                        | Beta Presentation Prep                          | Ubisoft Playtest Session – Mar 18        |
| Mar 22 @ 1pm                             | Mar 24 @ 10am                                   | Beta Release & Playtest Report – Mar 26   |
| Beta Presentation                        | Game Design Research 2                          |                                           |
| Mar 29 @ 1pm                             | Mar 31 @ 10am                                   | Monetization & Metrics                    |
| AI for Games                             |                                                |                                           |
| Apr 5 @ 1pm                              | Apr 7 @ 10am                                    | Tech/Music Build – Apr 8                  |
| TBD                                      | TBD                                             | Uken/Game loft Demo – Apr 26              |
|                                         |                                                 | Final Game Submission – Apr 28            |
**Course Materials**

- Web Page: Quercus (itch.io for milestone submissions)
- Discord: https://discord.gg/PdRtesH7ca
- TA Contact: 404ta@cs.utoronto.ca

**Course Deliverables**

*Note: For milestone presentations, half of the groups present in the OCADU lecture (Fri 8:30-11:30).*

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Game Jam Assignments</td>
<td>5% each (10% total)</td>
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<tr>
<td>- One-day hackathon events (one at UofT, one at OCADU)</td>
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<tr>
<td>Game Brainstorming</td>
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<tr>
<td>- Submitting ideas for potential games for the project.</td>
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<tr>
<td>Milestone #1: Game Pitch &amp; Creative Brief</td>
<td>5% &amp; 2%</td>
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<tr>
<td>- Present main game idea and how it targets the theme and the audience.</td>
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<tr>
<td>- Describe game mechanics, secret ingredients, and what a completed final product will look like.</td>
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<tr>
<td>- Submit: Creative brief document</td>
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<tr>
<td>Milestone #2: Design Presentation &amp; Design Document</td>
<td>5% &amp; 5%</td>
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<tr>
<td>- 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)</td>
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<tr>
<td>- Submit: Design document</td>
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<tr>
<td>Milestone #3: Game Alpha</td>
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<td>- In-class demo of playable prototype.</td>
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<td>- Describe plans for upcoming sprints and goals for final product.</td>
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<td>- Submit: Game demo on itch page</td>
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<tr>
<td>Milestone #4: Beta Release &amp; Playtesting Report</td>
<td>5% &amp; 5%</td>
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<td>- In-class demo of completed product, and playtesting results.</td>
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<tr>
<td>- Submit: Playtesting report</td>
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<tr>
<td>Milestone #5: Tech &amp; Music Complete Product</td>
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<tr>
<td>- Tech and music complete game, prepped for art team.</td>
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<tr>
<td>- Final reflections on development process and final product.</td>
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<tr>
<td>Final Milestone: Playtesting Demo &amp; Final Items</td>
<td>10% &amp; 5%</td>
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<tr>
<td>- Testing &amp; evaluation at Uken/Gameloft/Zynga playtest event</td>
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<tr>
<td>- Submit: Final game, video trailer, peer evaluation</td>
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<tr>
<td>Tech Demo, Tutorial Level, Updated Game Demo</td>
<td>5% each (15% total)</td>
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<tr>
<td>- Progress checks to demonstrate current state of game.</td>
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<tr>
<td>Itch.io page</td>
<td>10%</td>
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<td>- A development journal, outlining your group’s weekly progress, challenges and setbacks.</td>
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<tr>
<td>Participation</td>
<td>10%</td>
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<tr>
<td>- Participating in class, feedback on presentations, running playtesting sessions, etc.</td>
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