

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	Office	Phone	Email
Steve Engels	BA4266	(416) 946-5454	sengels@cs.toronto.edu (put “404” in subject)
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Course Materials

- **Web Page:** <http://www.cs.utoronto.ca/~csc404h>
- **TA Contact:** 404ta@cs.utoronto.ca
- **Suggested Text:** Rabin, Steve. *Introduction to Game Development*, Charles River Media.

Course Schedule

Tutorial	Lecture	Deliverables
Jan 8 ⇒ Course Intro	Jan 10 ⇒ Intro to Unity	Game Jam Assignment 1 – Jan 12
Jan 15 ⇒ Game Mechanics (MDA)	Jan 17 ⇒ Ludology I	Game Brainstorming – Jan 15 Game Jam Assignment 2 – Jan 19
Jan 22 ⇒ Pitching Games	Jan 24 ⇒ Pitch Presentations	Creative Brief – Jan 25
Jan 29 ⇒ Mini-Demo (Basic Tech)	Jan 31 ⇒ Character & Level Design	Tech Proof-of-Concept – Jan 29
Feb 5 ⇒ Design Documents	Feb 7 ⇒ Design Presentations	Design Document – Feb 8
Feb 12 ⇒ Mini-Demo (Tutorial)	Feb 14 ⇒ UI/UX Design	Tutorial Level Demo – Feb 12
Reading Week		
Feb 26 ⇒ Prototypes & Playtesting	Feb 28 ⇒ Alpha Presentations	Playable Prototype – Feb 28
Mar 5 ⇒ Topic TBA	Mar 7 ⇒ Ludology II	Gameplay Playtesting
Mar 12 ⇒ Mini-Demo (Updates)	Mar 14 ⇒ Ubisoft Playtesting	Updated Game Demo – Mar 12 Ubisoft Playtest Session – Mar 14
Mar 19 ⇒ Beta Overview	Mar 21 ⇒ Beta Presentations	Beta Release – Mar 22
Mar 26 ⇒ Monetization & Metrics	Mar 28 ⇒ Game AI	
Apr 2 ⇒ Level Up Overview	Apr 4 ⇒ Final Playtest Demo	Zynga/Uken Playtest – Apr 4 Level Up Showcase – Apr 17

Course Deliverables

Note: For all presentation milestones, groups must provide feedback when not presenting.

Game Jam Assignments	5% each
<ul style="list-style-type: none">One-day hackathon events (one at UofT, one at OCADU).	
Game Brainstorming	3%
<ul style="list-style-type: none">Submitting ideas for potential games for the project.	
Milestone #1: Game Pitch & Creative Brief	5% & 2%
<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	10%
<ul style="list-style-type: none">Present all pre-coding design details of the final game.Includes mock-ups, storyboards, mood boards, sketches, data models, etc.Also include technology proof-of-concept (presentation), and task breakdown (document)Submit: Design document	
Milestone #3: Game Alpha	5%
<ul style="list-style-type: none">In-class demo of playable prototype.Describe plans for upcoming sprints and goals for final product.Submit: Link to development repo	
Milestone #4: Beta Release & Playtesting Report	5% & 5%
<ul style="list-style-type: none">In-class demo of completed product, and playtesting results.Submit: Playtesting report	
Milestone #5: Playtesting Demo & Final Items	15% & 5%
<ul style="list-style-type: none">Testing & evaluation at Zynga/Uken playtest event<ul style="list-style-type: none">Level Up Showcase on April 17th (http://www.levelupshowcase.com)Final reflections on development process and final product.Submit: Final game, video trailer, peer evaluation	
Mini-Demos	5% each
<ul style="list-style-type: none">Show progress and demonstrate current state of game (when possible).	
Design Blogs	10%
<ul style="list-style-type: none">A development journal, outlining your group's weekly progress, challenges and setbacks.	
Participation	10%
<ul style="list-style-type: none">Participating in class, presentations, etc.	