CSC404H1 F

Introduction to Video Game Design

Fall 2024 Syllabus

Course Meetings

CSC404H1 F

Section	Day & Time	Delivery Mode & Location
LEC5101	Wednesday, 5:00 PM - 9:00 PM	In Person: MY 360

Refer to ACORN for the most up-to-date information about the location of the course meetings.

Course Contacts

Instructor: Elias Adum
Email: elias@cs.toronto.edu
Office Hours and Location: Wednesdays, 4-5pm, BA2272 (Inside BA2270), Or by appointment.

Teaching Assistant: Karthik Mahadevan
Email: karthikm@dgp.toronto.edu
Office Hours and Location: By appointment only

Teaching Assistant: Bogdan Pikula
Email: bogdan.pikula@mail.utoronto.ca
Office Hours and Location: By appointment only

Course Overview

Concepts and techniques for the design and development of electronic games. History, social issues, and story elements. The business of game development and game promotion. Software engineering, artificial intelligence, and graphics elements. Level and model design. Audio elements. Practical assignments leading to team implementation of a complete game.

Students must submit an application to the course describing relevant interests, experience, and skills and general academic history. Application questions are set and assessed by the instructor. Applications from St. George students enroled in a Computer Science program or the Data Science Specialist program will be considered first. Applications by students from other programs with appropriate prerequisites will be considered as space permits.

Please visit https://q.utoronto.ca/courses/221753/pages/400-level-course-balloting-and-applications for application deadlines and details. A decision on your application will be confirmed approximately 2-3 weeks after the application deadline, so students should enrol in an alternate course until the results of their application are confirmed.

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

Prerequisites: CSC301H1/ CSC317H1/ CSC318H1/ CSC384H1/ CSC417H1/ CSC418H1/ CSC419H1
Corequisites: None
Exclusions: CSC404H5. NOTE: Students not enrolled in the Computer Science Major or Specialist program at A&S, UTM, or UTSC, or the Data Science Specialist at A&S, are limited to a maximum of 1.5 credits in 300-/400-level CSC/ECE courses.
Recommended Preparation: None
Credit Value: 0.5

Marking Scheme

Assessment	Percent	Details	Due Date
Game Jam 1	5%	One-day hackathon events held at UofT. Alternative assignment for those who cannot attend.	2024-09-07
Game Ideas	3%		2024-09-08
Game Jam 2	5%	One-day hackathon events held at UofT. Alternative assignment for those who cannot attend.	2024-09-14
Pitch Presentation	5%		2024-09-18
Creative Brief	3%		2024-09-18
Tech Demo	3%		2024-09-25
Design Presentation	5%		2024-10-02
Design Document	10%		2024-10-02
Playable Level	3%		2024-10-09
Alpha Presentation	10%		2024-10-23
Updated Game Demo	3%		2024-11-06
Beta Presentation	10%		2024-11-13
Playtesting Report	5%		2024-11-13
Final Presentation	10%		2024-11-27
Game Trailer	5%		2024-11-27
Developer Logs	5%		2024-11-27
Participation	10%		No Specific Date

Late Assessment Submissions Policy

Lateness will only be accepted in extenuating circumstances, and only by clearing it with the instructor ahead of time. Most of the assignments are group based projects or presentations

that cannot be changed. If students need to deliver something past the deadline, they should clear it with the instructor first .

Policies & Statements

Lecture Recording

Online lectures & tutorials for this course (including your participation) may be recorded on video and may 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.

In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor. For questions about recording and use of videos in which you appear please contact your instructor

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.

Generative AI

In this course, you may use generative artificial intelligence (AI) tools, including ChatGPT and GitHub Copilot, as learning aids and to help complete deliverables. While some generative AI tools are currently available for free in Canada, please be warned that these tools have not been vetted by the University of Toronto and might not meet University guidelines or requirements for privacy, intellectual property, security, accessibility, and records retention. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. They may even provide citations to sources that don't exist—and submitting work with false citations is an academic offense. These tools may be subject to service interruptions, software modifications, and pricing changes during the semester.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely entirely on these tools to complete your coursework. Instead, we recommend treating

generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Overreliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance in this course, in later courses, or in future work or studies after graduation.