Game Development Project – CS4480Y
Course Outline

1. Course Information

Course Information

Developing games of commercial scale and quality is an incredibly challenging task, whether the game is intended for entertainment or serious applications. This course provides practical experience in the various aspects of developing a large-scale game project. Through a group project, this course will examine the concepts, theories, tools, technologies, and techniques for code and content generation for modern games.

Lecture Hours

Mondays, 11:30 AM - 12:30 PM.

List of Prerequisites
Registration in the Minor in Game Development
Corequisites: Computer Science 4482A/B, Computer Science 4483A/B

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

One instructor will be managing and supervising the project aspects of this course:

Instructor: Mathias Babin

Office Hours: By appointment
E-Mail: mbabin2@uwo.ca
Students must use their Western (@uwo.ca) email addresses when contacting their instructors.

3. Course Syllabus, Schedule, Delivery Mode

Course Texts

There are no required texts for this course, but one reference is recommended on the game development process, and may be available for purchase from the Book Store at Western:

• [A Playful Production Process For Game Designers (and Everyone)](). First Edition, by Richard Lemarchand, published by MIT Press, 2021.

To assist with project development, there are many excellent references available online. While printed books are also available from many retailers, they quickly get out of date, and so it is difficult to require you to purchase one.

References and suggested readings may be provided throughout the course as the project requires them. Please check back to the course website for updates and more information.

Lectures

Lecture time will not be used to deliver lectures in the traditional sense. Instead, this time will be primarily used to organise and track the status of project deliverables and milestones in the course. Guest lecturers from the games industry may be brought in occasionally, and this time may be used for their talks. It is important to note that classes may not be held every Monday throughout the year; further details on class scheduling will be posted on the course website.

4. Course Materials

Course Website

The CS4480Y website is accessible through OWL at https://westernu.brightspace.com/. Class and project information will be posted on this website fairly regularly, and you are responsible for reading and checking it frequently.

If students need assistance with the course OWL site, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Computing Facilities

Computing facilities are available in person

Note: After-hours access to Computer Science lab rooms is by student card. If a student card is lost, you will need to visit the Student Services Building to obtain a replacement. As of 2025, the cost for a replacement card is $50. More information is available at:
https://registrar.uwo.ca/services/western_onecard_and_photo_standards.html.
Students enrolled in Computer Science courses will be granted access to the labs within 7 days of enrolment. If you do not have access to the labs after 7 days, please open a ticket with Science Technology Services at https://helpdesk.sci.uwo.ca.

E-Mail Contact

We will occasionally need to send e-mail messages to the whole class, or to students individually. In accordance with University policy, the centrally administered e-mail account provided to students (i.e. your e-mail address @uwo.ca) will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

5. Methods of Evaluation

Student Evaluation

Grades will be based on group project work, divided across four milestones throughout the course, with each requiring different deliverables and work to be completed; this includes participation during each of our in-person sessions. If for any reason the project schedule given below cannot be adhered to, the project marks will be prorated accordingly.

Projects

Milestones (tentative)
Milestone 1: 12.5%, due October 24, 2024
Milestone 2: 22.5%, due December 05, 2024
Milestone 3: 17.5%, due February 06, 2025
Milestone 4: 37.5, due March 27, 2025

About the Milestones
- Generally, each milestone will require the completion or progress towards a number of deliverables, as well as either oral or written reporting on work completed.
- Descriptions of deliverables for the project milestones will be posted on the course website as they become available, and discussed in class.
- Any changes, updates, and clarifications to deliverables will also be posted on the website. It is your
- responsibility to monitor these pages closely.
- Milestones will involve programming, documentation, and presentation (PowerPoint slides with audio) or class discussion appropriate to the tasks at hand.
- While the project is a group project, grades will be assigned to each student based on both group and individual performance at each milestone. Individual performance will be based on a number of factors, some of which may include peer evaluations, contributions made during class, repository logs, individual reports of work completed, and so on.

Submission of Milestones

- All milestone deliverables will be submitted electronically. Details will be given in the milestone descriptions.

- Documentation elements of project milestones may also require a paper submission. If this is necessary, details of this will also be given in the milestone descriptions.
- Presentation or oral reporting related to project milestones will occur during class, as discussed in the milestone descriptions.
- Your project milestones are expected to be your own work. On occasion, you may be allowed to make use of code or resources from an outside source. Check with the instructor if you are uncertain about the places in which you can use code written by another person. If you use code from an outside source when you are not explicitly allowed to by the milestone description, or use a source other than what is explicitly designated in the description, you may be charged with an academic offence.

Late Submissions
- Late milestones submissions will not be accepted.
- Extensions will be granted only by the course instructor. As discussed above, if you have serious medical or compassionate grounds for an extension, you must take supporting documentation to the Academic Counselling unit of your faculty, who will contact the instructor.

Bi-Weekly Progress Updates

Aside from submitting milestones, a bi-weekly progress update is required as part of the course requirements without making them formal milestones. Students are required to attend lectures and update the class with your groups' progress (2-3 slides/Game Demo). The purpose is to ensure your group is staying on track, and receive early feedback from myself. This will also be your opportunity to earn participation marks.

General information about missed coursework
Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar:
https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult Accessible Education.

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:
https://registrar.uwo.ca/academics/academic_considerations/

- All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline. All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request without supporting documentation in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation:

  o Group Project

- When a student mistakenly submits their one allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the Coursework with Assessment Flexibility section below, the request cannot be recalled and reapplied. This privilege is forfeited.

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6. Additional Statements

Religious Accommodation
When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

https://www.edi.uwo.ca.

Accommodation Policies
Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf

Academic Policies
The website for Registrar Services is https://www.registrar.uwo.ca/.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Plagiarism: Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence. Please note, however, that students are not allowed to make use of the work of others unless explicitly instructed to do so in the description of an assignment.

All projects are to be exclusively your own work. While project work requires you to work in teams, each team is expected to act individually. You may discuss approaches to problems among yourselves; however, the actual details of the work (coding, documentation, etc.) must be an individual effort. Incidents that are judged to be the result of academic dishonesty will be reported to the CS Department Academic Integrity Committee. The selection of penalty to be applied is up to the Chair, with consultation of the instructor.

The standard departmental penalty for assignments that are judged to be the result of academic dishonesty is, for the student's first offence, a mark of zero for the assignment, with the offence reported to the Dean of your home faculty. You are responsible for reading and respecting the Department of Computer Science's policy on Scholastic Offenses. and Rules of Ethical Conduct.

The University of Western Ontario uses software for plagiarism checking. Students may be required to submit their written work and programs in electronic form for plagiarism checking.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com/).

Support Services
Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic-related matters: https://www.uwo.ca/sci/counselling/.

Students who are in emotional/mental distress should refer to Mental Health@Western (https://uwo.ca/health/) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (https://learning.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Additional student-run support services are offered by the USC, https://westernusc.ca/services/.