

The University of Western Ontario  
London, Canada

## Department of Computer Science

# CS 2212B - Introduction to Software Engineering

## Course Outline - Winter 2024

### Course Description

The informal approaches that most individual programmers use when writing small programs do not work very well when applied to the development of large pieces of software and team programming situations. Software engineering is a discipline that applies principles of traditional engineering to improve software, as well as its development and maintainability.

In this course, we will examine the stages of the software engineering process, including requirements gathering, specification, design, implementation, and testing. We will also cover the practicalities of software engineering, covering a number of the key tools and technologies leveraged in successful endeavours. A large group project, completed by teams of students, will serve to reinforce concepts learned and give students practical experience developing software in a realistic work environment.

The following list of topics may be covered, depending on time and the dynamics of the semester.

- Overview of software engineering
- Software processes and workflows
- Agile software development
- Software requirements gathering and modelling
- Software design concepts
- Implementation of software
- Testing and software quality management
- Managing software projects
- Enterprise-scale software and collaboration tools

#### Prerequisite Requirements

- Computer Science 2210a/b and 2211a/b
- Students are assumed to be familiar with the Java programming language

#### Antirequisites

- Software Engineering 2203A/B

*Note: 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.*

## Instructor Information

**Instructor:** Dr. Daniel Servos  
**E-Mail:** [dservos5@uwo.ca](mailto:dservos5@uwo.ca) (please include CS2212 in the subject of all e-mails)  
**Office:** MC387  
**Office Hours:** By Appointment  
Book via: <http://danielservos.ca/apt>  
**Website:** <http://danielservos.ca>

### Office Hours

Instructor office hours must be booked 24 hours in advance using the above link. When booking an office hour, you should include a description of the topic you wish to discuss and any relevant files including a copy of any assignment, project, document, etc. that you wish to ask questions about.

### E-Mail Contact

Students must use their Western (@uwo.ca) email addresses when contacting their instructor and include “CS2212” in the subject line of their e-mail. Failing to do this may result in your e-mail being marked as spam and not delivered properly. Every attempt will be made to answer all e-mails within two business days.

E-mails regarding personal matters and medical accommodations should be sent directly to the course instructor ([dservos5@uwo.ca](mailto:dservos5@uwo.ca)) and not a teaching assistant.

E-mails regarding assignment marking and regrading should first be addressed to the TA who marked your assignment and only to the course instructor if your discussion with the TA was not satisfactory.

### Teaching Assistant Consulting

Teaching assistants will be available weekly for consulting periods. These sessions will be held in-person and the location, dates, and times for each will be listed on the OWL course site. The number of TA consulting sessions offered and the scheduling of each will depend on the number of teaching assistants assigned to the course and will be announced on the OWL course site once available.

A list of teaching assistants and their contact information will be posted to OWL once available.

## Course Format

This format of this course will be blended with both in-person lectures/tutorials and asynchronous online videos and assigned readings from the textbook. Readings, videos, and other online resources will be posted weekly to the OWL course site each Monday before 10AM. To be successful in this course, you will need to both attend the in-person lectures and complete the assigned videos/readings.

### Lecture Hours

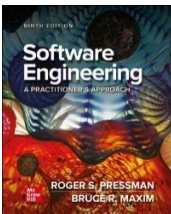
- Tuesday 9:30 AM to 11:30 AM, MC-110
- Wednesday 10:30 AM to 11:30 AM, NSC-1

Students are expected to bring blank paper and writing utensils to class. **Bringing a laptop is also highly encouraged** to enable you to follow along with examples and tutorials.

## Course Materials

### Required Textbook

The following textbook is **required** and available for purchase [from the university bookstore](#) and other sources as both a physical book and eText:



Software Engineering: A Practitioner's Approach  
9<sup>th</sup> Edition

By Roger Pressman and Bruce Maxim

ISBN10: 1259872971

ISBN13: 9781259872976

<https://www.mheducation.com/highered/product/1259872971.html>

Readings and ungraded homework from this text will be assigned weekly on OWL. Additional free online references and suggested readings may also be provided throughout the course as the project requires them. Please check the course OWL website weekly for updates and more information.

Both a [physical textbook version](#) and an [eText version](#) are available. Either is acceptable for this course, but please note that the eText version is only a 180-day rental.

### Optional Textbook

The textbook “*UML Distilled: Brief Guide To Standard Object Modeling Language*” (ISBN 978-0321193681) is **highly recommended** but optional. No readings or homework will be assigned from this textbook, but it will be useful when working on UML. You can obtain a copy from the university bookstore.

## Technology Requirements:

- Access to a modern personal computer running Windows or macOS.
- A webcam (can be built into a laptop).
- A microphone (can be built into a laptop).
- A reliable internet connection.
- Highly Recommend but not required: A laptop or tablet you can take to class.

## Course Site

The course website is located within OWL. To access the website, navigate to <http://owl.uwo.ca> and login with your Western University personal computer account (user id and password). All course content, assigned readings, notes, assignments and class information will be posted to this site each week. You are responsible for checking the course site regularly.

If students need assistance with the course OWL site, they can seek support on the OWL 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

Each student will have access to computing facilities administered by the Department of Computer Science and/or Western University. In accepting their accounts, students agree to abide by the Department's [Rules of Ethical Conduct](#). During this course, we may also make use of cloud infrastructure provided either by Western or by Amazon; details on this will be discussed in class.

*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 2023, the cost for a replacement card is \$35. More information is available at [https://registrar.uwo.ca/services/western\\_onecard\\_and\\_photo\\_standards.html](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>.*

## Student Evaluation

Element	Weight
Group Project	65%
Participation	15%
Quizzes (4)	20%

To be eligible to obtain a passing mark in the course, your weighted quiz grade **must** be 35% or higher **AND** it must be clear that you contributed to the group project in some way. A maximum grade of 45% will be given if you do not satisfy these requirements.

To be eligible to receive a grade of C or higher, your weighted quiz grade **must** be 40% or higher **AND** it must be clear that you contributed to **each component** of the group project in some way. Otherwise, the maximum overall mark you can receive is 58%.

Final grades will be rounded to a whole number by truncating the decimal places (i.e. taking the floor of the decimal final grade such that a 89.56% becomes a 89%). All other grades will be rounded to two decimal places using conventional rounding rules (i.e. a digit less than five will be rounded down, a digit of 5 or more will be rounded up).

## Group Project

All students are required to be an active participant in a term long group project that will involve the specification, design, and implementation of a reasonably large-scale software system. While the project is a group project, **grades will be assigned to each student based on both group and individual performance for each component.** 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, meeting minutes, individual performance during the project demonstration, and so on. **If it is clear that you made virtually no contributions to your group project based on these factors, your maximum grade will be 45%. If it is clear that you contributed to only some components but not others, your maximum grade will be 58%.**

Details on the overall topic of the project will be posted to OWL by January 22<sup>nd</sup>, with more details on each project component posted on the dates listed in the table below (these dates are tentative and subject to change). Any changes, updates, and clarifications to these descriptions and dates will also be posted on the OWL website. It is your responsibility to monitor these pages closely.

## Project Components (dates are tentative)

Component	Weight (of your final grade)	Posted On (tentative)	Due Date (by 11:55PM) (tentative)
Requirements Documentation & Team Contact	7.5%	January 22 <sup>nd</sup>	February 12 <sup>th</sup>
Peer Review of Others & Postmortem (individual)	7.5%	March 11 <sup>th</sup>	April 1 <sup>st</sup> (for your team)  April. 8 <sup>th</sup> (for your review of other teams)
Peer Review of You by Your Team (individual)	10% <sup>1</sup>	N/A	N/A
Design Documentation	10%	February 5 <sup>th</sup>	March 4 <sup>th</sup>
Implementation and Delivery (includes peer review of your team by others)	20%	February 26 <sup>th</sup>	April 1 <sup>st</sup>
Testing Documentation	10%	February 26 <sup>th</sup>	April 1 <sup>st</sup>

### All dates listed above are tentative and subject to change.

If for any reason a project component must be cancelled, the project marks will be pro-rated. The project components are worth 65% of the overall mark for the course. If a component must be cancelled for the whole class for any reason, the remaining project component weights will be pro-rated to add up to 65%.

### Team Project

- You will be given the opportunity to form your own teams of 4 or 5. The deadline to do so is January 15<sup>th</sup>. After this date the instructors will decide on the composition of the teams. The instructors' decisions are final. The instructor will attempt to make sure that each team has at least 4 members and no more than 5 members.
- If a team has less than 5 members, the instructor may add additional team members at their discretion up until January 22<sup>nd</sup>.
- All teams will be assessed the same regardless of the number of members.
- Individual students may submit a request to be taken out of the team to which they were assigned for a **good reason** (such as a prior conflict with one of the team members). Such

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<sup>1</sup> Normally the peer review of you by your teammates is worth 10%, however, to pass this course you must have made a clear and good faith effort to participate in the group project. If it is clear, you did not contribute to the project (from both the peer reviews and software logs) you will not pass this course (max final grade of 45%).

requests must be made to the instructor before January 22<sup>nd</sup> and detail the good reason.  
**No changes are allowed in team composition after January 22<sup>nd</sup>.**

### **Weekly Team Meetings**

- Students are required to keep in contact and collaborate closely with their teammates through weekly meetings scheduled and organized by the team starting after January 22<sup>nd</sup>.
- Weekly meetings may occur in-person or virtually online (e.g. using Zoom or MS Teams). **They cannot be done solely through e-mail or a text/audio only medium.**
- Each team is required to write minutes of each meeting, listing date, time, attendance, what the topics of discussion in the meeting were, any decisions that were made, and which team members were assigned which tasks.
- A weekly meeting is not required during reading week.
- Weekly meetings cannot be held on holidays recognized by Western University.
- All team members are expected to attend these meetings and teams are expected to schedule meetings during times when all members can attend.
- Failing to hold or properly document these meetings will impact the team's project grade. Each major project component will have part of the points allocated to meeting attendance and minutes that have occurred up until that point.

### **Weekly TA Meetings**

- Teams are required to meet weekly in-person with their assigned TA to keep them apprised on the progress of the project, any concerns they may have, or issues the team may be facing. These are different from the Weekly Team Meetings but can occur directly before/after them.
- This time will also act as the TA's consulting time with the students on the team and a time for them to offer help with anything related to the course.
- It is the team's responsibility to work with their assigned TA to arrange a time and place for these meetings.
- These meetings should be at most 20 minutes long.
- Teams must come prepared to each meeting and be able to present what progress has been made since the last meeting, any issues blocking their progress, and their plans for the upcoming week.
- All team members are expected to attend these meetings.
- These meetings will be part of the team's project grade. Each major project component will have part of the points allocated to meeting attendance and minutes that have occurred up until that point.

## **Project Demonstration (Acceptance Testing)**

- **Project demonstrations will take place between April 1st and April 5<sup>th</sup> depending on when the team is scheduled to meet with the TA.**
- This involves 1) creating a short video presentation that showcases the team's finished implementation of the project, its features, on how it satisfies the project requirements and 2) meeting with the group's TA one last time for acceptance testing where they will answer questions about the process and design of their project. **All team members must be present for acceptance testing and all team members must be involved in creating the video.**
- Teams are responsible for scheduling a demonstration date/time that works for all team members and their assigned TA. No class will be held this week to give times when all students should be available.

## **Peer Evaluations**

- Each student will evaluate both their team members and the project demonstration videos of at least 4 other teams.
- Your review of your team members will be based on the team contract you created and how you feel your team members performed in your group. This is due April 1<sup>st</sup>.
- Your review of other teams will be based on the project demonstration video created by the other team. This is due April 8<sup>th</sup>.
- These reviews must include both a numerical evaluation as well as detailed feedback. Failing to provide any feedback will result in a significant mark penalty.
- Peer Evaluations must be fair, reasonable, accurate, and use professional language.

## **Submission**

- All components must be type-written for legibility and to facilitate electronic submission. If components require the creation of diagrams or illustrations, these too must be done electronically. Appropriate tools will be discussed in class and in the descriptions of the components.
- All digital submissions (including diagrams and peer evaluations) must be legible and written in English. Any submissions that cannot be understood by the marker (due to spelling, grammar, language used, poor image resolution, etc.) will be given a zero grade. It is the student's responsibility to ensure all diagrams are legible.
- You are required to submit each component electronically through OWL **in addition to** retaining a copy on the tools used (e.g. Confluence, Bitbucket, etc). If final submissions are too large for OWL submission, alternate arrangements will be made.



- We reserve the right to use similarity and metadata detection software to detect possible plagiarism cases.
- **Components are expected to be individual efforts (where individual could also mean designated group in the case of a group project component).** Any code or content that is borrowed from an existing source, book, course resource, generated by a tool, or created by a person not in the group must be clearly identified as such in the appropriate documentation; otherwise, this may constitute a plagiarism offence. This includes any code created by AI tools such as ChatGPT or Code Autopilot as well as any other tool that generates code or diagrams.
- While discussion about the project is encouraged between groups, directly using code or copying from another group (including groups from past semesters) is strictly prohibited and a scholastic offence for all groups involved. Groups should not share any project components with other groups.
- Borrowing a large amount of code from outside sources (even if it is properly identified) will lead to a reduced implementation component grade. You will only be granted marks on code your team writes and implements. If you have any doubt about how much is too much, please ask the course instructor for guidance.

### **Late Policy**

- It is expected that groups budget enough time to properly submit their project components via OWL and allow for any unforeseen technological issues. Groups are expected to regularly backup their work and submit well before any deadline.
- The late penalty for all course components (except for the final project demonstration video and peer review) is: 1 day late = 5% of grade, 2 days late = 10% of grade, 3 days late = 20% of grade. For example, if a component is out of 100 points and you are 1 day late, 5 points will be removed (regardless of your score on the component).
- The final project video and peer review will not be accepted late. A zero grade will be given for these components if they are not submitted by the due date.
- No submissions will be accepted more than 3 days past the due date. A zero grade will be given after this point.
- This policy does not apply to the quizzes, which must be done during class.

### **Marking**

- Project components will be initially marked by a teaching assistant assigned to the course to provide feedback and assign a grade for that project component.
- **It is expected that all team members contribute something to each project component.** A team member who makes no contributions to the group project will be unable to pass this course (max 45% final grade). A team member who only contributes to some but not all components will not be able to obtain a final grade of over 58%.

- Every effort will be made to have project components marked by the teaching assistant and feedback provided within 3 weeks of the submission date, preferably sooner. If we are unable to comply with our intended return dates, revised dates will be posted on the course website and/or e-mailed to the class.
- A request for adjustment of the grade returned by the teaching assistant must be made within 1 week of the date your project component was returned.
- Such a request must be first made to the teaching assistant who marked your project component. If your discussion with the teaching assistant was not satisfactory, you may submit it in writing (e-mail) to the course instructor. **You must include the specific and detailed reasons why you believe you deserve more marks.**
- Component marks may be posted periodically throughout the term through OWL. It is your responsibility to check that your marks have been recorded correctly.

### **Medical Illness or Serious Circumstances for Group Project Components**

- Team members unable to complete group work due to illness (or other serious circumstances) must submit their documentation to academic counseling for their home faculty and contact their group and the course instructor as soon as possible to inform them they will be unable to complete their assigned duties. Ideally within 24 hours when possible.
- If a team member is unable to complete work on a group component due to documented illness or other serious circumstances, they must work with their group to exchange responsibilities as soon as possible. For example, they may work with their group to do more on the next project component in exchange for the group taking over their responsibilities for the current component.
- This agreement **must** be recorded in the team's contract and **must** be communicated to the course instructor.
- Extensions will only be granted if your documentation is approved, and it is clear you have worked with your team to exchange duties, you have communicated your situation to course instructor in a timely manner (within 24 hours of the end of the consideration request), and this still will not allow your team to meet the deadline.

### **Use of Confluence, Jira, and Bitbucket**

- Groups **must** retain and work on all documents on the Confluence wiki site and keep all code in the provided Bitbucket repository.

- All tasks assigned to group members and the tracking of bugs/issues **must** be done so through Jira. Tasks must be assigned when appropriate in the project (for example, you cannot assign them retroactively at the end of the project).
- Failing to do this will impact the team’s grade.

## Backups

It is your responsibility to keep up-to-date backups of all project components and project files in case of system crashes or inadvertently erased files. Retain copies of all material handed in, as well as the actual graded version, to guard against the possibility of lost components or errors in recording marks. It is not safe to discard these materials until you are satisfied that your final mark for the course has been computed properly.

No extension or accommodation will be given for lost files or work. It is expected that teams back up their work **as well as** store it on Confluence and Bitbucket.

## Participation

As Computer Science is a highly collaborative field, it is important to develop the skills and tools you need to work with others on complex programming and technical problems. For this reason, CS2212 makes heavy use of active learning and group work in in-class activities. It is expected that you will be an active participant in all course activities and come prepared by reading the required readings before class each week.

Participation will be tracked using “participation points” that are awarded for different activities that demonstrate engagement and participation in the course, aiding other students, completing in-class activities, answer questions in-class, or making meaningful contributions on the course forums.

The following are examples of activities that award participation points (other opportunities may be added at the instructor’s discretion):

Activity	Participation Points	Description
Completing in-class activities.	0 to 150	In-class lectures may include a group work activity or tutorial section that asks you to work with a group to complete a small poll, quiz, short written response, or other activity. Completing these (even if your answer is incorrect) will reward points. These activities must be done in-class during the designated time and recorded through the <a href="http://cs1.ca">http://cs1.ca</a> tool. <b>For full points a proper summary of the activity must be submitted</b> through the tool. Most (but not necessarily all) weeks will have at least two activities worth 150 points <b>in total</b> .

Participation tickets	75	During in-class lectures the instructor <b>may</b> award participation tickets for answering a question out loud in-class or otherwise showing involvement in the lecture. These tickets will award 75 participation points if entered into the <a href="http://cs1.ca">http://cs1.ca</a> tool. Tickets must be entered into the tool within one week of being issued and must be earned by you (you can not enter another student's ticket).
Answering questions in-class using the in-class response tool.	0 to 25	During in-class lectures the instructor may occasionally ask questions to the class. If you answer these questions via the <a href="http://cs1.ca">http://cs1.ca</a> tool, a small amount of participation points may be awarded based on the quality of your answer and the question being asked. Responses must be made in a reasonable time frame after the question is asked and your answer must be in some way related to the question. <b>At most 50 points per week can be earned in this way.</b>
Answer a question on the course forums.	0 to 100	Answering an unanswered question posted by another student on the course forums in a meaningful way or significantly adding to an already answered question. To count, the answer must be posted in good faith. No points will be awarded to students working together to post/answer questions purely for points. Most meaningful answers will be given 50 points on average depending on the quality. <b>At most 300 points can be earned from asking/answering questions.</b>

Participation points will be converted into percentage (out of 15%) to calculate your final participation mark using the following table:

Level	Grade (out of 15%)	Minimum Participation Points Required
0	0%	0
1	1.5%	350
2	3%	450
3	4.5%	560
4	6%	700
5	7.5%	875
6	9%	1100
7	10.5%	1375
8	12%	1500
9	13.5%	1800
10	15%	2050
11	15% + up to 2% bonus to final grade (depending on number of extra points past 2300), Final grade cannot be over 100%.	2300

No fraction of percentages will be granted for participation. You must make it to the next level to increase your participation grade. For example, 1150 points would still be a level 6, worth 9%.

**Important!** If you experience technical issues during the lecture that prevent you from submitting the in-class group work via the in-class responses system you **must** inform the instructor during or immediately after the lecture (before the instructor leaves the room). Failing to do so will result in no participation points being earned for the activity.

Due to technical limitations, participation points will not be updated live, and it is your responsibility to estimate them if you wish to track your progress. A final official calculation will be done **after** April 8<sup>th</sup> and **all work that counts towards participation must be completed by April 5<sup>th</sup> at 11:55pm.**

The final subjective decision of what constitutes a “meaningful contribution” or how many points is assigned for a contribution is at the sole discretion of the course instructor. Quantity or length of posts/answers is not a substitute for quality and multiple low-quality posts/answers do not add up to one meaningful contribution. While spelling and grammar will not be marked, all posts/answers must be legible, intelligible, and written in English.

If for any reason the course must be moved online for a period of time, the in-class activities may be offered asynchronously online. In such a case, you may be required to have a webcam and microphone. The course instructor reserves the right to switch the in-class response tool to different software should issues arise with the <http://cs1.ca> response tool. In such a case, the points will remain the same and only the tool used to submit answers/record participation will change.

To encourage students to read this course syllabus in full 100 participation points can be earned by navigation to <http://cs1.ca/ask/syb?c=cs2212> and inputting your username and student number by January 22<sup>nd</sup>. No points will be granted for this after this date. You may not share this link with other students.

In the instructor’s sole discretion, participation points may be removed for disruptive in-class or online behaviour including but not limited to talking during inappropriate times, inappropriate comments, or failing to work well with other students during group work activities. Participation points may also be removed for attempting to “cheat” the participation system. For example, submitting in-class group work for students not in attendance or giving a participation ticket to a student that did not earn it. Spamming the discussion forums or the in-class response system with low quality posts purely to inflate your participation mark may also be penalized.

**Sharing a participation code with a student not in attendance or submitting work for a student not in attendance is considered to be an academic offence for all students involved. As is using a participation ticket (duck) you did not earn.** Academic offences related to participation will result in a zero-participation grade and referral to the integrity committee who may apply additional penalties.

## Quizzes

There will be four quizzes **tentatively** scheduled on the following dates:

Quiz #	Date (Held During Class / Tentative)	Weight of Final Grade
1	January 30 <sup>th</sup>	5%
2	February 13 <sup>th</sup>	5%
3	March 5 <sup>th</sup>	5%
4	March 19 <sup>th</sup>	5%

The format, length, and content of each quiz will be announced before the quiz but may include any content covered to date in the course. This may include content from lectures, online videos, assigned readings, and the group project.

The quiz will be held in-class during the Tuesday lecture. It is the student's responsibility to arrive on time. No students may take the quiz if they are more than 15 minutes late and no accommodation will be given for arriving late without an approved reason.

## Contingency Plan for an In-person Class Pivoting to 100% Online Learning

In the event of a COVID-19 resurgence or other emergency situation during the course that necessitates the course delivery moving away from face-to-face interaction, affected course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor. In the event of a move to 100% online learning, quizzes will be conducted online using OWL and Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service, including a webcam. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>

## Accommodation and Accessibility

### Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The Academic Accommodation for Students with Disabilities policy can be found at:

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/Academic\\_Accommodation\\_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Accommodation_disabilities.pdf)

### Academic Consideration for Student Absence

#### For Items Worth Less Than 10%

- **Group Project Component:** See the details in the Group Project section in this syllabus under “Medical Illness or Serious Circumstances for Group Project Components”.
- **Individual Project Components:** Students must submit documentation of their absence to academic counseling of their home faculty. If this absence is approved, the weight of this component will be moved to the student’s quiz grade.
- **Participation:** Students are expected to attend class and complete the in-class participation activities each week. To allow students to make up for missed classes, more participation points are available than required for a full participation grade. As such it should be possible to miss one lecture and still obtain a full participation grade.
- If a lecture is missed due to illness or extraordinary event, students may submit documentation to academic counseling for their home faculty. If it is approved and covers the correct dates, the course instructor will offer an alternative participation activity that can be completed online.
- At most two alternative participation activities will be offered for approved absences. After this point, the weight of the missed participation activities will be placed on the students’ quizzes.
- **All participation points must be earned by the April 5<sup>th</sup> participation deadline.** After this date no considerations requests will be considered for participation.
- If you will be submitting a consideration request for your absence, you must inform the course instructor of your absence within 48 hours of the missed lecture or the end date of your consideration request (whichever is longer) or your absence will not be considered.
- **Quizzes:** Students must submit documentation of their absence to academic counseling of their home faculty. If this absence is approved, the student will be allowed to take a makeup quiz at the end of the term.
- The date of this makeup will be scheduled closer to the end of the term. Should the student also miss the makeup quiz, they will have to write the makeup quiz the next time the course is offered.
- The format of the makeup quiz may be different from the regular quiz but will cover the same content.
- Should multiple quizzes be missed, the make up quiz will be longer (cover the content for all quizzes missed) and be worth equal to the weight of the missed quizzes.

- **Medical Documentation:** For all cases, you are required to submit your documentation as soon as you are able to do so.
- For medical documentation you are required to submit a Student Medical Certificate (SMC) signed by a licensed medical practitioner to academic counselling. **Your professor cannot receive any medical documentation, this must be sent to and approved by academic counseling for your home faculty.**
- For all cases where a consideration request is submitted to academic counseling you must follow up with the course instructor via e-mail within 48 hours of the course element's due date, or the end of the period covered (which ever is longer). If you fail to do this, no accommodation will be granted.
- **No Retroactive Accommodations:** Any accommodation for flexibility with due dates or class/quiz attendance due to disability must be discussed with the course instructor via e-mail before the course element is due or the lecture/quiz is missed. No consideration will be given retroactively in these cases.

### **For Items Worth More Than or Equal to 10%**

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the University's medical illness policy at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/academic\\_consideration.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration.pdf)

The Student Medical Certificate is available at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf)

Note that in all cases, students are required to contact their instructor via e-mail within 24 hours of the end of the period covered or sooner.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation required for absences must be submitted to the Academic Counselling office of a student's Home Faculty.**

### **Religious Accommodation**

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the Western Multicultural Calendar:

<https://multiculturalcalendar.com/ecal/index.php?s=c-univwo>

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see [http://www.registrar.uwo.ca/examinations/exam\\_schedule.html](http://www.registrar.uwo.ca/examinations/exam_schedule.html)).



## Ethical Conduct

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: [http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://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 [Undergraduate Chair](#). 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 Counselling webpage for information on add/drop courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: <https://www.uwo.ca/sci/counselling/>

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 Student Accessibility Services (SAS) at (519) 661-2147 if you have any questions regarding accommodations.

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/>.

Learning-skills counsellors at the Student Development Centre (<http://www.sdc.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.

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

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