

Western University
Department of Computer Science

Computer Science 2034B / Digital Humanities 2144B
Data Analytics: Principles and Tools
Course Outline -- Winter 2024

1. Course Description

A comprehensive and interdisciplinary introduction to data analytics using modern computing systems, with equal attention to fundamentals and practical aspects. Topics include sources of data, data formats and transformation, usage of spreadsheets and databases, statistical analysis, pattern recognition, data mining, big data, and methods for data presentation and visualization.

Prerequisites

No prerequisites are required for this course.

2. Learning Outcomes

By the end of this course, students will be able to:

- Describe types, sources, and facets of data.
- Use spreadsheets, macros and VBA to analyze data.
- Utilize programming constructs to process data.
- Explain relevant statistical analysis and machine learning techniques.
- Evaluate different visual artifacts for data presentation.
- Choose data analytics tools appropriate for data problems.

3. Instructor: Dr. Daniel Servos

E-Mail: dservos5@uwo.ca

Office: Middlesex College 387

Office Hours: By appointment on Wednesdays (*see appointment link for times*)

Appointment Link: <http://danielservos.ca/apt>

Office hour appointments must be requested via <http://danielservos.ca/apt> at least 24 hours before the desired date. The number of appointments available each day is limited and will be scheduled on a first-come first-served basis. No office hours will be held on the week of February 19th (reading week).

4. Textbook:

There are no required textbooks. However, freely accessible readings will be assigned throughout the term.

5. Technology Requirements:

To successfully complete this course, all students **must** have access to a personal computer capable of running the current version of Microsoft Excel included in Office 365. Office 365 (including Microsoft Excel) is [available for free to Western](#) students for both Windows and MacOS.

To participate fully in in-class activities, students are required to bring a device capable of connecting to Western's Wi-Fi network and loading web pages. A laptop is highly recommended, but a modern smart phone should also suffice.

6. Teaching Assistants

Teaching Assistant (TA) contact information and consulting hour details will be posted on OWL when available.

Teaching assistants will hold an open in-person consulting hour each week. No appointment is required to attend a TA's consulting hour. No consulting hours will be held on the week of February 19th (reading week) or after April 6th.

7. Lectures

There will be one lecture held each week in **AHB-1R40** at the following time:

- Tuesday 2:30PM - 4:30PM

Students are expected to bring blank paper and writing implements to each lecture. A laptop, tablet, phone or other electronic device capable of connecting to the internet and viewing web pages is also required for participation in some in-class activities.

8. Course Website & E-Mail Communication

This course uses the Online Western's Learning (OWL) system (<https://owl.uwo.ca>).

Announcements, assignments, labs, lecture notes, and other course-related information will be posted on this website. It is the responsibility of the student to ensure their UWO account is operational for both E-Mail and using the OWL course site and routinely check both for updates.

Before sending questions to the course instructor, please first check the course syllabus (this document), the OWL course site, and the OWL course forums before sending your inquiry. **General questions that may be helpful to other students (and do not contain personal information) should be posted to the OWL course forums so that others may benefit from the answer.** E-mail messages should be sent from your UWO e-mail account and include "CS2034" in the subject line to avoid any spam filters.

You can normally expect a response with-in 2 business days (nonholiday Mondays to Fridays). Please ensure enough time is available for a response when asking questions regarding assignments that are nearing a deadline.

9. Time zone and Scheduling of Course Components:

All times listed in this document and on the OWL course site are assumed to be in Eastern Time (the local time of the Western University campus) unless otherwise stated. Assignment due dates and exams will be scheduled for the Eastern Time Zone. Students must ensure they are available during these times. No alternative deadlines, or exam dates/times will be offered for students who make travel plans that conflict with these dates.

10. Evaluation:

Element	Weight
3 Assignments	25%
Labs (10)	10%
Participation	10%
Midterm Exam	20%
Final Exam	35%

If an assignment or lab has to be cancelled for any reason, the remaining assignments/labs weights will be prorated (scaled) to add up to the total weight for that element. If the midterm exam is cancelled, the weight will be placed on the final exam.

11. Assignments:

- There will be 3 assignments.
- Tentative assignment schedule (dates subject to change) and weights are as follows:

Assignment #	Posted On (tentative)	Due Date (tentative)	Weight (of final grade)
1	Jan. 22 nd	Feb. 7 th	7%
2	Feb. 26 th	Mar. 13 th	8%
3	Mar. 11 th	Apr. 3 rd	10%

- **Assignments are due 5 minutes before midnight (11:55PM)** of the due date. It is expected that you will submit well in advance of this deadline to account for any issues (technological or otherwise) as such no extensions will be given for such issues.
- All submissions will be submitted electronically via the OWL course management system. No submissions will be accepted via e-mail or other means.
- Assignment descriptions will be posted on the OWL course site. Any changes, updates, or clarifications to assignments will also be posted on the OWL course site. It is your responsibility to monitor these OWL pages regularly for updates (an e-mail may not always be sent).
- Note that an Excel Sheet or VBA function that produces the correct output is not necessarily a “working” solution. It must also satisfy the specifications given in the assignment description.
- **Your assignment solutions are expected to be your own individual work**, not the products of group effort. You may not share your assignment solutions with another student for any reason nor are you to request solutions from another student or make use of solutions available on-line. Such sharing of solutions is considered a scholastic offence and will be penalized as such.
- **Use of tools to generate solutions is forbidden.** All solutions must be your own work and can not be generated by any tool including large language models (e.g. ChatGPT) or any other tool. Using tools to generate solutions is considered a scholastic offence and will be penalized as such.
- **It is your responsibility to keep up-to-date off-site backups** (e.g. on OneDrive or Dropbox) of assignment files. Retain copies of all material handed in, as well as the graded assignment, to guard against the possibility of lost assignments or errors in recording marks. You should keep these materials until you are satisfied that your final mark for the course has been computed properly. No extensions will be given for lost or corrupted files.
- Assignments will be marked by the TAs, who follow marking schemes provided by the instructor. Every effort will be made to have assignments marked and handed back within 3 weeks after the due date, preferably sooner.

- **You should direct any questions or appeals about marking to the TA who marked your assignment.** If your discussion with the TA is not satisfactory, you may further discuss the issue with the course instructor.
- A request for an adjustment in an assignment mark must be made within 1 week following the date the assignment is returned. All assignments marks are considered to be final after that date.
- The course instructor reserves the right to completely remark an appealed assignment or otherwise correct any errors they notice in the TA's marking. This may raise or lower the grade compared to that given by the TA.
- **This course uses a late coupon system for assignments:**
 - Each student starts the course with 4 late coupons.
 - One late coupon can be used to push an assignment due date back by 1 day (up until 11:55PM the next day).
 - At most 3 late coupons can be used per assignment.
 - If you have no late coupons remaining or your assignment is more than 3 days late, a zero grade will be given.
 - An estimate of your late coupons will be tracked through a gradebook item on OWL, however, this will not be updated live and may be out of date. It is your responsibility to keep track of your own late coupons and ensure you have enough remaining before submitting late.
 - No action is required to use a late coupon. Any late submission will automatically use the required number of late coupons. All late submissions must use late coupons as the alternative is a zero grade.
 - After all late coupons are used, no extensions will be given for assignments except for in the event of serious medical or compassionate grounds. A student must follow the procedure for Academic Accommodation for Medical Illness as given in this document.
 - Late coupons must be used before special circumstances (consideration requests) are considered.

12. Labs

- Labs start the week of Jan. 15th for lab sections 002, 003, and 004 (labs on weekdays other than Monday).
- Labs start the week of Jan. 22nd for lab section 007 (Monday).
- Lab sections 005 and 006 have been cancelled. If you are in one of these sections, you must work with the department to switch in to one of the other lab sections or take this course in another term. No accommodation will be made for students in these lab sections who have not switched to a different lab section.
- There will be 10 equally weighted two-hour labs. **Your lowest lab grade will be dropped (missing a lab counts as your lowest lab grade).**
- See the Western Timetable for location and time information.
- Labs will be run by TAs and act as practical tutorial sessions that may cover new material or review concepts discussed in lectures. Collaboration on lab problems with other students is allowed and encouraged, but you must create your own solution (it can not be another student's work).
- Lab descriptions will be posted on the OWL course site weekly on Mondays. Any changes, updates, or clarifications to labs will also be posted on the website. It is your responsibility to monitor these pages frequently for any updates.
- **It is expected that you read over lab materials beforehand and come prepared to lab sessions** with any required resources or reference materials. Some labs may have tasks to complete before attending the lab session.
- As seating in labs is limited, **you are required to attend the lab section you are registered in.** No credit will be given for attending the wrong lab session unless you have the express written permission of the course instructor.

- To obtain full marks for a given lab session, **you must attend the lab in person and complete the lab to the TA's satisfaction** (see the Lab Rubric at the end of this document for details).
- TAs may give a zero or reduced lab mark to students that arrive late, do not work on lab material during the lab session, leave before completing the lab and receiving a grade from the TA, or are unable to answer questions about their work. It is expected that students abstain from working on assignments during lab time until they have completed and received a mark for the lab.
- **Labs can not be made up for in future lab sessions or submitted via e-mail.**
- Labs missed as part of an approved accommodation (e.g. medical illness) will result in the student's lab mark being reweighted to not include the missed lab, but only if more than 1 lab session is missed. The first missed lab session missed, will count as your lowest lab grade that will be dropped. If more than 4 lab sessions are missed as part of an approved accommodation, the weight of the missed labs will be placed on the final exam rather than reweighting.
- Accommodations for missed labs will only be approved if 1) they are supported by medical documentation and approved by academic advising and 2) you inform the course instructor of your absence within 48 hours of the lab or the end date of your consideration request (which ever is longer).

13. 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, CS2034/DH2144 makes heavy use of active learning and group work during 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, Or answer questions in-class.

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 award points. These activities must be done in-class during the designated time and recorded through the http://cs1.ca tool. For full points a proper summary of the activity must be submitted through the tool. Most (but not necessarily all) weeks will have activities worth 150 points in total.
Answer a question on the course forums.	0 to 100	Answering an unanswered question posted by another student on the OWL 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. The answer must be correct, timely , and address the student's question within a week of posting it or before the assignment deadline (if the question is referring to an assignment), which ever is sooner. A high-quality answer post will include examples, diagrams, or screenshots to aid in the explanation as well as cite its sources. Most meaningful answers will be given 50 points on average depending on the quality and correctness. At most 300 points can be earned from answering questions.

Participation Tickets (Ducks)	75	During in-class lectures the instructor may 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 http://cs1.ca tool. Tickets must be entered into the tool within one week of being issued.
Answering a question in-class using the in-class response tool	0 to 10	During in-class lectures the instructor may occasionally ask questions to the class. If you answer these questions via the http://cs1.ca 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. At most 50 points per lecture can be earned from answering question this way.

Participation points will be converted into percentage (out of 10%) to calculate your final participation mark using the following table:

Level	Grade (out of 10%)	Minimum Participation Points Required
0	0%	0
1	1%	350
2	2%	450
3	3%	550
4	4%	650
5	5%	850
6	6%	1050
7	7%	1300
8	8%	1800
9	9%	2250
10	10%	2400
11	10% + up to 2% bonus to final grade (depending on number of extra points past 2800), final grade can not be over 100%.	2800

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 6%.

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 8th and **all work that counts towards participation must be completed by April 5th 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=cs2034> and inputting your username and student number by January 22nd. 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.

14. Midterm & Final Exam:

- **Tentative** exam dates are as follows:

Midterm Exam

Date: Saturday March 2nd (tentative)

Time: TBA (2 hours in length)

Location: TBA

Final Exam

Date/Time/Location: Scheduled by the registrar's office during the Winter exam period.

Length: 3 hours.

- The format and exact rules of the exams will be announced before the exam (at least 2 weeks in advance if possible).
- Both exams will be comprehensive and may include anything covered in lectures, labs, assignments, and assigned readings up until the point in the course unless otherwise stated by the instructor.
- No electronic devices of any kind, including but not limited to calculators, phones, laptops, and smart watches, will be allowed during the examinations. Having these on your person (e.g. in your coat or pocket) during the exam will be considered an academic offence.
- No communication or collaboration with any other person is allowed during the exams.
- No resources, cheat sheets, texts, notes, or references (including dictionaries) are allowed for the exams unless otherwise specified in the exam rules.
- No make-up midterm exam will be held. Students absent due to an approved accommodation will have their final exam mark reweighted to include the weight of the midterm exam.
- Any illness or exceptional circumstances that occur while writing the final exam (e.g. if you fall sick while writing the exam) must be reported to the chief proctor (normally your instructor) during the exam. Such incidents will not be grounds for academic consideration if they are not reported to the chief proctor immediately.
- Violation of any exam rule (mentioned above or on the exam itself) or cheating of any kind will result in a 0% grade for the final exam and the possibility of additional penalties as deemed appropriate by the course instructor, department or university including but not limited to a failing grade being entered for the course.

15. Scholastic Offences & Academic Dishonesty

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.

To preserve a fair and honest learning environment for all, scholastic offences and any breach of ethical conduct will not be tolerated and punished according to department policy. In addition, to the offences outlined in the department and university policy, the following will be considered academic misconduct:

- Working with another person on assignments (assignments are to be completed individually).
- Sharing assignment solutions with other students or posting them on-line in a manner that is accessible to other students (e.g. GitHub, Course Hero, in Facebook groups, via Discord, etc.).
- Using any part of another student's assignment solution including but not limited to formatting and templates.
- Using a tool to generate solutions to any part of an assignment including large language models (e.g. ChatGPT) or other tools. No part of your assignment may be generated by such tools, including creating starter code or templates.
- Sharing your account or using another student's UWO account in any way.
- Submitting a Group Work Code for an activity you did not participate in or were absent for.
- Submitting a participation ticket that you did not earn yourself.
- Sharing or giving a Group Work Code or participation ticket to another student.
- Attempting to circumvent or in any way manipulate the systems in place for monitoring participation or attendance (e.g. CS1.ca ASKTool, etc.).
- Altering a midterm or exam in any way after it has been graded.
- Misrepresenting work done during labs with the intent to receive a higher lab grade.
- Taking the place of another student in labs sessions, exams, midterms, etc.
- Any other offences listed in a department or university policy.

You are responsible for reading and respecting the Computer Science Department's policy on: Scholastic Offences:

https://www.csd.uwo.ca/undergraduate/current/policies/scholastic_offenses.html

and Rules of Ethical Conduct:

https://www.csd.uwo.ca/undergraduate/current/policies/ethical_conduct.html

Plagiarism Detection Software

All assignments, quizzes, and exams may be subject to textual and metadata similarity review using plagiarism detection software. All assignments, quizzes and exams submitted for such checking may be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of such services are subject to the licensing agreement with The University of Western Ontario. These services and software may include but are not limited to Turnitin (<http://www.turnitin.com>), MOSS, SCANEX, and custom plagiarism detection software developed for the course.

Computer-marked multiple-choice quizzes and exams may be subject to remote proctoring software (Proctortrack) and submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating. For details on Proctortrack and remote proctoring see the final exam section.

Tutors and Outside ‘Help’ on Assignments

Students may receive the help of a tutor on assignments, so long as the tutor only identifies errors or demonstrates sample problems that are **not** part of the assignment. If the content of your assignment is significantly different than if you had not received help, then this is an indication you may have crossed the line into cheating. Again, if you are unsure about how much help is too much, ask your instructor.

The role of tutoring is to help students understand course material. Tutors should not write any part or all of an assignment for the students who hire them. Tutors should not ‘advise’ or ‘suggest’ what is to be entered into an assignment or the solutions to any portion of the assignments. Any aid beyond what you would have received directly from the instructor will be considered an academic offense. Having employed the same tutor as another student is not a legitimate defense against an accusation of collusion, should two students’ hand in assignments judged similar beyond the possibility of coincidence.

16. Email Contact & Online Conduct

Occasionally email messages may be sent to the entire class or to students individually. Emails will be sent to your UWO email address as assigned to you by Information Technology Services (ITS). **It is your responsibility to read your Western email on a frequent and regular basis as well as keep up to date with posts and new content on the OWL course site.**

You should note that email at the university and thru other providers have quotas or limits on the amount of space that is dedicated to each account. Unchecked email may accumulate beyond those limits, and you may be unable to retrieve important messages from the university. Losing email is not an acceptable excuse for not knowing about the information that was sent.

Email contact with the course instructor is encouraged, and I endeavour to reply to messages within 2 business days (non-holiday Mondays to Fridays). However, **messages regarding general questions and questions about course content and assignments should be posted to the OWL forums.** Questions that are specific to you (e.g. accommodations, extension requests, etc.) or your assignment’s content should be sent to the course instructor.

Please first check the Forums section in OWL to see if the information has already been posted before creating a new post. Please use proper, appropriate and respectful English when sending an email message or posting on the course web site.

NOTE: Email messages must be sent from your university account and **MUST** include: “CS2034” in the subject line. Email messages without CS2034 in the subject line may automatically be trapped and deleted by the instructor’s SPAM filter and **will NOT be available, read or responded to.**

NOTE: Do **NOT** use ‘Respond To’ from any email or announcement message from OWL. You **MUST** type in the instructor’s email in the destination. Please check the destination before sending an email to ensure it is addressed to the instructor and **NOT** to: **postmaster@owl.uwo.ca**

[this is very important – please make sure you understand and follow the standards above.]

NOTE: Please also include a title or topic description of the contents of the email in the subject line and when possible send e-mails from your @uwo.ca e-mail account. The instructor will be unable to respond to questions about your personal grades, assignment, etc. if they are not sent via a known @uwo.ca e-mail account for security and privacy reasons.

17. 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, the final exam 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/>

18. 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%

- **Assignments:** For assignments you are expected to use the late coupon system for any minor absences. It is your responsibility to manage your late coupons to ensure you have enough remaining for any unforeseen circumstances and not use them unnecessarily. **You will be expected to use all of your late coupons before any special considerations are given.**
- If insufficient late coupons remain or your absence would last longer than 3 days past the due date, **you are required to submit documentation** in support of your absence to academic counseling of your home faculty. This documentation must cover the correct range of time **before** the assignment due date. **Note that instructors, are unable to view medical documentation, as such it must be sent to academic counseling.**
- **No extensions will be given over 3 days past the due date.** After this point the only accommodation possible (with approved medical documentation) will be moving the weight of the assignment to the final exam and the assignment will not be accepted or graded.
- 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 assignment due date or the end date of your consideration request (which ever is longer) or your absence will not be considered.
- **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 final exam.
- **All participation points must be earned by the April 5th 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 ever is longer) or your absence will not be considered.
- **Labs:** Up to one lab may be missed without impacting your final grade as your lowest lab grade will be dropped. This one free lab must be used before any special considerations are given.
- Labs missed as part of an approved accommodation (e.g. medical illness) will result in the student's lab mark being reweighted to not include the missed lab, but only if more than 1 lab session is missed. The first missed lab session missed, will count as your lowest lab grade that will be dropped. If more than 4 lab sessions are missed as part of an approved accommodation, the weight of the missed labs will be placed on the final exam rather than reweighting.
- Accommodations for missed labs will only be approved if 1) they are supported by medical documentation and approved by academic advising and 2) you inform the course instructor of your absence within 48 hours of the lab or the end date of your consideration request (whichever ever is longer).
- **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 can not 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 (whichever ever is longer). If you fail to do this, no accommodation will be granted.
- **No Retroactive Accommodations:** Any accommodations for flexibility with due dates or class/lab attendance due to disability must be discussed with the course instructor via e-mail before the course element is due or the lecture/lab 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

The Student Medical Certificate is available at

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).

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under Special Examinations).

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) 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>.

Appendix: Lab Rubric

Grade	Exemplary (10 - 8 marks)	Satisfactory (7 - 6 marks)	Needs Improvement (5 - 0 marks)
Description	<ul style="list-style-type: none"> • All required components of lab completed and correct. • Demonstrates understanding of lab content and correctly answers questions about their work. • Arrives on time and prepared for the lab with all required prelab readings and activities completed. • Does not leave before completing the lab in full. 	<ul style="list-style-type: none"> • At least half of lab content is completed. • Several or significant errors in work. • Likely that errors could be corrected if more time was given. • Likely that most of lab could be completed with more time. • Demonstrates some understanding of completed lab content and able to explain most completed work. • Arrives on time and with most prelab readings and activities completed. • Does not leave before completing the majority of the lab or the end of the lab session (which ever happens first). 	<ul style="list-style-type: none"> • Majority of lab tasks are incomplete. • Many significant errors in work. • Unlikely that errors could be corrected if more time was given. • Unlikely that most of lab could be completed with more time. • Fails to demonstrate understanding of lab content. • Arrives late, without prelab readings or leaves early. • Did not work on assigned lab during lab time.

Lab Rubric Notes:

- Some labs may have a bonus/optional part that will allow for a grade over 10. Bonus marks will only be given if the required parts of the lab are completed to the TA's satisfaction, contain no errors, and you can answer questions correctly about your work. Bonus marks (including bonus participation marks) can not add more than 2% bonus to your final grade. Your final grade can not be over 100%.
- Lab absences will result in a 0/10 grade for the missed lab. You are only considered to be in attendance if the TA grades your lab work during the lab session.
- You are expected to work on the lab during the lab session and collaborate with your fellow students. TAs may give a reduced grade if you come to the lab with the lab already completed or stay for less than 30 minutes (even if the lab is completed and correct).