Schulich MEDICINE & DENTISTRY | Western Science

Bachelor of Medical Sciences (BMSc) Program

Department of Biochemistry Course Syllabus for Fall 2025

Biochemistry 3382A – Biochemical Regulation

This course takes place at Western University, which is located on the traditional territories of the Anishinaabek, Haudenosaunee, Lūnaapéewak, and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum.

Students who are in emotional and/or mental distress should refer to https://www.uwo.ca/health/ for a complete list of options about how to obtain help.

The Department of Biochemistry recognizes diversity of identity and experience as a source of strength that promotes excellence, innovation, flexibility and adaptability in our discipline. We embrace, nurture, value and celebrate this diversity.

1. Technical Requirements:

Stable internet connection

Laptop or computer

This is an in-person course that may have a few optional online components, like office hours

2. Important Dates:

Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
September 4	November 3 – 9	December 9	December 10	December 11 – 22

September 30, 2025, is National Day for Truth and Reconciliation and is a non-instructional day
September 12, 2025: Last day to add or drop a Fall 12-week course
December 1, 2025: Last day to withdraw from a Fall 12-week course without academic penalty

3. Contact Information

Instructor(s)	Contact Information	Office
Dr. Brian Dempsey, he/him (course coordinator)	brian.dempsey@uwo.ca	Med. Sci. M389
Dr. Hong Ling, she/her	hling4@uwo.ca	Med. Sci. M334
Dr. John Capone, he/him	jpc@uwo.ca	Mol. Bio. Lab C1

Teaching Assistant(s)	Contact Information
Nancy Sun	nsun72@uwo.ca
Emmanuel Njoku	enjoku3@uwo.ca
Milan Mammen	mmammen@uwo.ca
Mairwyn Hall	mhall243@uwo.ca

4. Course Description and Design

Delivery Mode: in-person

An organism or cell must be able to regulate itself to coordinate numerous processes, respond to changes in its environment, and grow and differentiate in an orderly manner. One of the main objectives of this course is to introduce various biochemical mechanisms involved in cellular regulation.

The first series of lectures deals with the structure, dynamics, replication and repair of DNA – essential cellular processes that ensure faithful transmission of genetic material from generation to generation. The second set of lectures introduces key concepts in protein-DNA interactions, and how these interactions are crucial for regulating transcription of genes in both prokaryotes and eukaryotes. The third set of lectures of the course delves into cellular mechanisms that regulate mRNA abundance and stability. The last set of lectures will integrate topics into a discussion of genome editing and biotechnology.

Prerequisites: A minimum mark of 65% in either Biochemistry 2280A or Biochemistry 2288A; a minimum mark of 60% in either Chemistry 2213A/B or Chemistry 2273A; and a minimum mark of 60% in either Chemistry 2223B or Chemistry 2283G.

Timetabled Sessions

Component	Date(s)	Time	Location
lecture	Tues/Thurs	10:30 – 11:30 am	
lecture	Fri	2:30 – 3:30 pm	
tutorial: student group presentations	Tues	5:30 – 6:30 pm	

- **Attendance at all lecture sessions is required**.
- Students must attend only the tutorial session in which they are scheduled to give their group presentation.
- Asynchronous pre-work (reading and/or research) may be required before some lecture sessions, as directed by the instructors.
- When possible, an audio recording will be provided for the lecture sessions. This recording is not a substitute for attending lecture and should only be used as a learning supplement.

Office Hours*	Day/Dates	Time	Location
Dr. Dempsey	Mondays (Sept. – Dec.)	1:30 - 3:30 pm	Med. Sci. M389
Dr. Ling	Thursdays (Sept. 25 – Oct. 16)	1:30 - 3:30 pm	Med. Sci. M334
Dr. Capone	Tue (Nov. 7 – Dec. 5)	1:30 - 3:30 pm	Mol. Bio. Lab. C1

*Additional and/or online office hours can be arranged upon request. Please email an instructor to make arrangements.

All course material will be posted to OWL: https://westernu.brightspace.com/d2l/login. Any changes to course design will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the OWL Brightspace Help. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.
Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

5. Learning Outcomes

Upon successful completion of this course, students will be able to:

- describe the different types of structures formed by nucleic acids, and make predictions about how biochemical processes and changes in sequence and environment affect nucleic acid structure, stability, supercoiling, and metabolism
- with reference to specific proteins, explain the biochemical mechanisms of DNA replication at different situations, and how these processes are determined by the function-structure of proteins
- describe the different DNA repair mechanisms, and how a specific DNA repair pathway is regulated at molecular levels
- explain the key molecular components of transcription, including both DNA and proteins, and be able to formulate strategies to control gene expression with these components
- describe the RNA-based mechanisms used for genome defense in both bacteria and eukaryotes, and how these mechanisms have been adapted for use as genome-editing tools
- describe the different mechanisms that control mRNA turnover, stability and decay in eukaryotic cells, and be able to explain differences between cis- and trans-acting factors that control mRNA expression levels
- formulate general strategies for cloning and expressing genes based on the different types of restriction endonucleases used in recombinant DNA technologies
- formulate general strategies using techniques of synthetic biology to accomplish defined biotechnological goals
- analyze and draw conclusions from experimental data generated by techniques commonly used in biochemistry
- orally present the results and significance of biochemistry experiments to a scientific audience
- write a summary of a set of biochemistry experiments, targeting either a scientific or lay audience

6. Course Content and Schedule

Week	Dates	Topic	Instructor
1	Sept 4 – 7	Introduction/Nucleic Acid Structure	Dempsey
2	Sept 8 – 14	Supercoiling/Nucleotide Metabolism	Dempsey
3	Sept 15 – 21	Nucleotide Metabolism/DNA Replication	Dempsey/Ling
4	Sept 22 – 28	DNA Replication	Ling
5	Sept 29 – Oct 5	DNA Replication/DNA Damage & Repair	Ling
6	Oct 6 – 12	Protein-DNA Interactions	Dempsey
7	Oct 13 – 19	Regulation of Transcription	Dempsey
8	Oct 20 – 26	Prokaryotic Regulation of Transcription	Dempsey
9	Oct 27 – Nov 2	CRISPR Biology	Dempsey
10	Nov 3 – 9	Reading Week (starts November 3rd 12:01 AM)	N/A
11	Nov 10 – 16	Eukaryotic Transcription	Capone
12	Nov 17 – 23	Chromatin and Gene Regulation	Capone
13	Nov 24 – 30	Gene Regulation	Capone
14	Dec 1 – 7	Genome Editing/Review/Presentations	Capone
15	Dec 8 – 9	Presentations	Capone

The topics and dates above are approximate; this schedule may be adjusted during the term.

Student presentations

Dates	Activity	Topics
Tues. Sep 9	No presentations/Tutorial cancelled	N/A
Tues. Sep 16	No presentations/Tutorial cancelled	N/A
Tues. Sep 23	No presentations/Tutorial cancelled	N/A
Tues. Sep 30	NDTR - No presentations/Tutorial cancelled	N/A
Tues. Oct 7	Student presentations – During Tutorial	Dempsey
Tues. Oct 14	Student presentations – During Tutorial	Dempsey
Tues. Oct 21	Student presentations – During Tutorial	Dempsey
Tues. Oct 28	Student presentations – During Tutorial	Dempsey
Tues. Nov 4	Reading Week - No presentations/Tutorial cancelled	N/A
Tues. Nov 11	Student presentations – During Tutorial	Dempsey
Tues. Nov 18	Student presentations – During Tutorial	Ling
Tues. Nov 25	Student presentations – During Tutorial	Ling
Tues. Dec 2	Student presentations – During Tutorial	Ling
Fri. Dec 5	Student presentations – **In Class**	Capone
Tues. Dec 9	Student presentations – During Tutorial	Capone
Tues. Dec 9	Student presentations – **In Class**	Capone

Instructions for scheduling student presentations are given separately.

7. Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students can participate during lecture sessions by asking and answering questions
- Students must also participate in their presentation/summary groups. Note that marks may be adjusted based on peer feedback about your participation.

8. Assessment and Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weight	Due Date	Flexibility
Assign 1 - Dempsey	Short answer	highest 3 each x 10% lowest x 5%	Mon. Sept 29	72-hour no late penalty
Assign 2 - Ling	Short answer		Mon. Oct 20	
Assign 3 - Dempsey	Short answer		Fri. Nov 14	
Assign 4 - Capone	Short answer		Mon. Dec 1	
Oral presentation	Presentation - group	15%	Various dates	Designated
Scientific summary	Short essay - group	6%	Various dates	72-hour no late penalty
Lay summary	Short essay - group	6%	Various dates	72-hour no late penalty
Final exam	Short answer	38%	TBD – Registrar	Not applicable

Designated Assessment: Instructors are permitted to designate one assessment per course per term as requiring supporting documentation to receive academic consideration. See below for information on academic consideration policy and missed course work. For this course the following assessment has been designated as requiring supporting documentation:

- Group oral presentations – to be completed on various dates (tutorial and class sessions)

Information about flexibility in assessment

- Flexibility in assessment has been applied to this course; therefore, academic consideration requests may be denied for assessments where flexibility is included.
- This course employs flexible deadlines for assignments and summaries. The due dates can be found above in the course outline. For each assignment, students are expected to submit the assignment by the due date listed. Should illness or extenuating circumstances arise, students are permitted to submit their assignment up to 72 hours past the due date without a late penalty. Should students submit their assessment beyond 72 hours past the due date, a late penalty of 50% per day will be subtracted from the assessed grade. Requests for academic consideration supported by documentation must be submitted within 48 hours of the original due date in the table above. The instructor reserves the right to deny such academic considerations, given the due date flexibility provided. If you have a long-term academic consideration or an accommodation for disability that allows greater flexibility than provided here, please reach out to your instructor at least one week prior to the posted due date.

General information about assessments

- All assignments are due at 11:59 EST/EDT unless otherwise specified
- Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could be subject to late penalties (see below) or a 0
- Written assignments will be submitted to both Turnitin (statement in policies below) and Gradescope.
- Students will have unlimited submissions to both submission sites but cannot view their Turnitin similarity score
- Rubrics used to evaluate assessments and will be posted with the instructions
- A student might not receive the same grade as their group members if it is determined that the distribution of work was not equal based on peer feedback
- After an assessment is returned, students should wait 24 hours to review feedback before contacting the instructor; to ensure a timely response, reach out within 7 days
- Any assessment marking concerns must be received by the instructor within two (2) weeks of the grade being posted. Students should provide a clear written description and justification of a marking issue they have identified with any re-grade request they make.
- Assessment re-grading could result in the mark, increasing, decreasing, or remaining the same
- Prior to the filing of a written request for relief, students must attempt to resolve the concern regarding a mark or grade through informal consultation with the instructor. If the student is dissatisfied with the decision of the instructor or does not receive a decision from the instructor, a written request for relief must be submitted to the Department Undergraduate Chair within three (3) weeks from the date that the mark was issued.

Assignments will consist mainly of data analysis or application questions. Some questions on the final exam will resemble the assignment questions in style. Assignment question documents will be posted to OWL and student answer documents must be submitted to Gradescope.ca **and** to Turnitin via OWL by 11:59 pm on the indicated due date. Students will not be able to view the Turnitin similarity report for their assignment submissions.

Oral presentations will be given in groups/teams assigned by the instructors. Briefly, each team will choose a published paper from a provided list and will sign up to give a 10-minute oral presentation during the scheduled tutorial sessions. The presentation will summarize the content and significance of the paper.

One week after their oral presentation, each team will submit a **scientific summary** and a **lay summary** of their chosen paper. The 500- to 750-word scientific summary will be in the style of a *Nature* News and Views article targeted to a general audience of scientists. The 300- to 500-word lay

summary will be in the style of a news article targeted to the general public. These documents must be collaboratively and iteratively composed in Google Docs by the group. Upon final submission of the summaries Dr. Dempsey must be given access to the Google Doc to review the version history and assess a "writing process" mark. A PDF of these summaries should be submitted to Gradescope.ca **and** to Turnitin via OWL by 11:59 pm one week after the team's oral presentation. Groups will be able to view the Turnitin reports for their summaries. Detailed instructions for the oral presentations and written summaries, including marking rubrics and details of peer assessment, are provided in a separate document.

The **final exam** will cover all lecture content in the course and will consist of short-answer questions and problems based on the material. The final exam will take place during the December exam period as scheduled by the Registrar's Office.

Marking of assessments. The majority of marking in this course will be conducted using Gradescope software (including the final exam). The Gradescope software will be set so that all marking is done anonymously, such that the identity of the student submission is hidden from whomever is conducting the marking (TA or instructor).

Click here for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Information about late or missed assessments:

- Late assessments without academic consideration will be subject to a late penalty 50%/day
- An assessment cannot be submitted after it has been returned to the class; if the length of a student's academic consideration period prevents them from submitting one assignment before it is returned to the class, then the weight of one assignment will be transferred to the final exam.
- As stated above, teams must submit their written summaries one week after they give their presentation. Individual students who miss their team's oral presentation will be required to give a presentation relating to a different paper on a later date. They may still contribute to their team's original written summaries if possible.
- One make-up exam will be offered in early January, usually the first Saturday after classes start
- The final exam must be completed to pass the course. If the exam is missed with documented approval an INC will be recorded, and the student will complete the exam the next time the course is offered.

INC (Incomplete Standing): If a student has been approved by the Academic Advising Office (in consultation with the instructor/department) to complete term work at a later date, an INC will be assigned, which could impact program progression. Students with INC will have their course load in subsequent terms reduced to allow them to complete outstanding course work. Students may request permission from Academic Advising to carry a full course load for the term the incomplete course work is scheduled.

SPC (**Special examination):** If a student has been approved by the Academic Advising Office to write a Special Examination and the final exam is the only outstanding course component, an SPC will be assigned. If the class has a makeup exam, the student is expected to write the makeup exam. If the class doesn't have a makeup for the final exam or the student misses the makeup for the final exam for reasons

approved by the Academic Advising Office, the student will write the exam the next time the course is offered, which could impact program progression. Outstanding SPCs will reduce the course load for the term the exam is deferred as outlined in Definitions of Types of Examinations policy.

9. Communication

- Students should check the OWL Brightspace site every 24–48 hours
- Students should post all course-related queries on the OWL Brightspace discussion forum so that everyone can access the questions and responses
- Students should email their instructor(s) with any questions that can't be posted publicly
- Emails will be monitored daily; students will typically receive a response in 24–48 hours

10. Office Hours

- Office hours with instructors will be held in-person according to the times/dates in table above. Virtual attendance (Zoom) to the office hours can be arranged if the student emails the instructor in advance
- Additional office hours can be scheduled with any instructor, email to make arrangements.
- A system for TA office hours will be announced at the beginning of the term on OWL through the Discussions forum. TAs will be available to assist students with content questions upon request.

11. Course Materials

- All course resources will be posted in OWL Brightspace
- There is no required textbook
- Students should consult papers cited in class to achieve a fuller understanding of course material.
- The book "Writing in the Biological Sciences", 4th ed., by Angelika Hofmann (PB ISBN: 9780197543580), is recommended for advice on preparing written work and oral presentations in this course, as well as Biochem 3381A and Biochem 3380G. Print and ebook versions should be available through the bookstore.
- When possible audio recordings of lecture sessions will be provided (24-48 hours after lecture).

12. Professionalism & Privacy

Western students are expected to follow the Student Code of Conduct. Additionally, the following expectations and professional conduct apply to this course:

- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared (e.g., Must Knows Facebook group, Course Hero, Chegg, etc.)
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment. Relevant policies include Western's Non-Discrimination/Harassment Policy (M.A.P.P. 1.35) and Non-Discrimination/Harassment Policy – Administrative Procedures (M.A.P.P. 1.35). Any **student,** staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's Human Rights Office. Harassment and discrimination can be human rights-based, which is also known as EDI-based, (sexism, racism, transphobia, homophobia, islamophobia, xenophobia, antisemitism, and ableism) or non-human rights-based (personal harassment or workplace harassment).

13. How to Be Successful in this Class

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

1. Attend lecture regularly as scheduled. Engaging with the lecture content is key to performing well on the exam.
2. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule your time throughout the course.
3. Make it a daily habit to log onto OWL Brightspace to ensure you have seen everything posted to help you succeed in this class.
4. Follow checklists created on OWL Brightspace or create your own to help you stay on track.
5. Take notes as you go through the course material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the lectures.
6. Connect with your group members and communicate with them. Make sure you attend agreed upon meetings and complete group work assignments.
7. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
8. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

14. Western Academic Policies and Statements

A. Absence from Course Commitments

Medical, Compassionate, or Extenuating Circumstances

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term **without** supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

Students should also note that the instructor may **designate** one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Academic consideration requests may be denied when flexibility in assessment has already been included. Examples of flexibility in assessment include when there are assessments not required for calculation of the final grade (e.g. 8 out of 10 quizzes) or there is flexibility in the submission timeframe (e.g. 72 hour no late penalty period).

Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course syllabus. Supporting documentation for academic considerations for absences due to illness should use the Student Medical Certificate or, where that is not possible, equivalent documentation by a health care practitioner.

Policy: Academic Consideration – Undergraduate Students in First Entry Programs
Procedures: Student Medical Certificate

Religious Holidays

Students should review the policy for Accommodation for Religious Holidays (Appendix 1). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

Policy: Accommodation for Religious Holidays

Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates.

Policy: Definitions of Types of Examinations

B. Academic Appeals and Scholastic Offenses

Students can file a **request for relief from academic decisions** if the request is based on one or more grounds listed in the policy. Requests for relief generally fall into three categories, which are also listed in the policy. All requests for relief must be supported by evidence. A request for relief from academic decisions process was formally referred to as an appeal. Refer to the policy and procedures about further details and timelines.

Policy: Requests for Relief from Academic Decisions
Procedures: Undergraduate Student Academic Requests for Relief

Scholastic offences are taken seriously, and students are directed to read the appropriate policy, specifically, the definition of what constitutes a scholastic offence.

Policy: Scholastic Offences
Procedures: Undergraduate Scholastic Offences

Students may **appeal** some academic and scholastic disciplinary decisions by a Dean or their designate, to the Senate Review Board Academic (SRBA).

Policy: Senate Review Board Academic Appeals
Procedures: Senate Review Board Academic Appeals

C. Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation.

Policy: Academic Accommodation for Students with Disabilities

D. Correspondence Statement

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 his/her official university address is attended to in a timely manner.

E. Discovery Credit Statement

Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program.

Policy: Undergraduate Course Credit
Procedures: Discovery Credits

F. Statement on the Use of Electronic Devices

No electronic devices of any kind are permitted in course tests/examinations. This means no smart devices (watches, phones, glasses, etc.) or calculator. If a student is found to have a device on their person during an examination they will be given a mark of zero (0).

G. Statement on the Use of Generative Artificial Intelligence (AI)

Within this course, students are permitted to use AI tools exclusively for information gathering and preliminary research purposes. These tools are intended to enhance the learning experience by providing access to diverse information sources. However, it is essential that students critically evaluate the obtained information, exercise independent thinking, and engage in original research to synthesize and develop their own ideas, arguments, and perspectives. The use of AI tools can serve as a starting point for exploration, with students expected to uphold academic integrity by appropriately attributing all sources and avoiding plagiarism. Assignments and/or lab reports should reflect the students' own thoughts and independent written work. By adhering to these guidelines, students contribute to a responsible and ethical learning environment that promotes critical thinking, independent inquiry and allows them to produce original written contributions.

Students should be aware that Generative AI can make frequent mistakes with advanced biochemical concepts and data. Typically, the course resources provided, as well as the primary literature, are more reliable sources of Biochemical knowledge than an AI system. Students are responsible for all content that they submit and should carefully review any Generative AI responses they obtain for errors.

H. Turnitin and other similarity review software

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the 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 Western University and Turnitin.com.

15. BMSUE Academic Policies and Statements

A. Cell Phone and Electronic Device Policy (for in-person tests and exams)

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School that any electronic devices, e.g., cell phones, tablets, cameras, smart glasses, smart watch or iPod are strictly prohibited. These devices MUST be left either at home or with the student's

bag/jacket at the front of the room and MUST NOT be at the test/exam desk or in the individual's pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam and this will be documented as a Scholastic Offence. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

B. Copyright and Audio/Video Recording Statement

Course materials produced by faculty are copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. You must always ask permission to record another individual and you should never share or distribute recordings.

C. Rounding of Marks Statement

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. ***Final grades*** in this course are rounded to the nearest whole number based on the first decimal place. For example, a grade of 74.49 or lower will be rounded to 74, whereas 74.50 or higher will be rounded to 75.

Marks WILL NOT be arbitrarily increased to the next grade or GPA, e.g., a 79 will NOT be increased to an 80, and 84 WILL NOT be increased to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for arbitrary mark increasing will be denied. Marks will be assigned based on assessments in the syllabus and no extra work or tasks will be assigned to increase a mark.

Course grade rounding provisions, as described above, differ from cumulative and term averages. Cumulative and term averages will be calculated to two decimal places and rounded to the nearest whole number with .45 rounded up, for the purposes of admission to and progression in modules, scholarship retention, and Dean's Honour List.

Policy: Marks/Grades; Definitions of Grades; Grading Scale for Undergraduate Students

16. Support Services

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

Statement on Gender-Based and Sexual Violence

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 the following website:

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.

Other important links:

- Academic Advising (Science and Basic Medical Sciences)
- Learning Development and Success
- Office of the Registrar
- Wellness & Wellbeing
- Western USC Services

Appendix 1: Western University Academic Policies and Procedures

The policies and procedures listed in this syllabus are outlined in the table below. In some cases, a policy does not include an accompanied procedures document.

Academic Policy	Name of Policy/Procedure	Links
General Policy	Marks/Grades; Definitions of Grades; Grading Scale for Undergraduate Students	Policy
General Policy	Structure of the Academic Year	Policy
Registration, Progression, Graduation	Course Numbering Policy, Essay Courses, and Hours of Instruction	Policy
Registration, Progression, Graduation	Undergraduate Course Credit	Policy • Procedures
Examinations	Definitions of Types of Examinations	Policy
Examinations	Evaluation of Academic Performance	Policy
Examinations	Examination Conflicts	Policy
Rights and Responsibilities	Academic Accommodation for Students with Disabilities	Policy
Rights and Responsibilities	Accommodation for Religious Holidays	Policy
Rights and Responsibilities	Policy on Academic Consideration – Undergraduate Students in First Entry Programs	Policy • Procedures
Rights and Responsibilities	Requests for Relief from Academic Decisions (Undergraduate)	Policy • Procedures
Rights and Responsibilities	Requests for Relief from Academic Decisions (Graduate)	Policy • Procedures
Rights and Responsibilities	Scholastic Offences (Undergraduate)	Policy • Procedures
Rights and Responsibilities	Senate Review Board Academic Appeals	Policy • Procedures