



Physiology and Pharmacology Physiology and Pharmacology Laboratory-PhysPharm 3000E

Course Syllabus for Fall 2024/Winter 2025



Western University is committed to a **thriving campus**; therefore, your health and wellness matter to us! The following link provides information about the resources available on and off campus to support students: https://www.uwo.ca/health/ Your course coordinator can also **guide you** to resources and/or services should you need them.

1.	Technical	Requirem	ents:
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Stable internet connection



Laptop or computer

2. Important Dates:



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
September 5	October 12–20	December 6	December 7–8	December 9–22

September 30, 2024, is National Day for Truth and Reconciliation and is a non-instructional day December 2, 2024: Last day to withdraw from a full course without academic penalty

Classes Resume	Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 15–23	April 4	April 5–6	April 7–30

3. Contact Information

Course Coordinator	Contact Information	
Dr. Oana Birceanu	obircean@uwo.ca or Microsoft Teams	

Instructor(s) or Teaching Assistant(s)	Contact Information	
Hailey Drury	hhunte@uwo.ca	
Baur Negmetzhanov	bnegmetj@uwo.ca	

4. Course Description and Design

Delivery Mode: in person

Almost all our knowledge of physiology and pharmacology is based on the results of laboratory experiments. It was through carefully designed experiments that most of the information presented in lecture (Physiology 3120, 3140A, and Pharmacology 3620) was obtained. The same experimental approach is being used to solve the many remaining mysteries about how the body works and how diseases are treated with medications. We believe that to thoroughly understand the science of physiology and pharmacology, one must understand the experimental basis. This course is targeted at learning the scientific method along with data analysis, which is applied in both disciplines of physiology and pharmacology. Therefore, the laboratory exercises are a fundamental part of the study of physiology and/or pharmacology.

Overall Objectives: These laboratory exercises will

- 1. illustrate the use of the scientific method, and the nature, complex and endless variability in scientific research.
- 2. demonstrate the physiological/pharmacological processes studied in class as they apply to a living organism or cell.
- 3. emphasize the limitations that exist in the methods used in scientific investigation and appreciate as science students, that one must continue to critically evaluate the material presented in lectures and textbooks.

Prerequisites: Biochemistry 2280A; either Chemistry 2213A or 2273A; one of Physics 1028A/B, 1301A/B or 1501A/B and one of Physics 1029A/B, 1302A/B or 1502A/B; and 1.0 course from: Applied Mathematics 1201A/B, 1413, Calculus 1000A/B or 1500A/B, Calculus 1301A/B or 1501A/B, Mathematics 1600A/B. A minimum average of 75% in the previous year is required. Open only to students who are registered in Years 3 or 4.

Corequisite(s): N/A

Antirequisites: The former Physiology 3130z or Pharmacology 3580z. **Pre-or Corequisite(s):** Either Physiology 3120 or Pharmacology 3620.

Extra Information: 3 laboratory hours, 1.0 course.

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.

Timetabled Sessions

Component	Date(s)	Time
	Section 1: Tuesday AM	9:30 a.m. – 12:20 p.m.
Laboratory	Section 2: Tuesday PM	1:30 p.m. – 4:20 p.m.
	Section 3: Wednesday PM	1:30 p.m. – 4:20 p.m.

- Asynchronous pre-work must be completed prior to the laboratory sessions. You are expected to come to the laboratory having already read the requirements for that day.
- Attendance at sessions is required. This course has 4 rotations, each with its own deliverables. The sessions are 6 weeks long. If you miss 2 or more laboratory sessions within a rotation, you will not be permitted to submit the final deliverable for that session. The weight may be shifted to a future similar component of the course. Arrangements should be made with the course coordinator (obircean@uwo.ca) in the event that a laboratory week is missed.
- We do not have make-up sessions for this course. In the event that you miss your laboratory session, you may attend a different session within the same week.
- A recording may be provided of the introductory sessions through Microsoft Teams.

- ☑ Closed captioning will be provided on audio or video recordings.
- WHMIS certification is required from every student attending the laboratory. If you do not have the certification by week 3 of the course, you will not be permitted to continue with the experiments.

All course material will be posted to OWL: https://westernu.brightspace.com/d2l/login. We will also use Microsoft Teams for direct communication with the instructors in this course. Any changes will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the <u>OWL Brightspace Help</u>. Alternatively, they can contact the <u>Western Technology Services Helpdesk</u>. 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:

- familiarize themselves with various experimental techniques (real-time quantitative PCR, enzymatic assays (end point and kinetic), western blots, cell culture, etc.)
- develop a hypothesis and design an experiment with appropriate controls to test the hypothesis
- organize, analyze and interpret scientific data, using appropriate experimental and mathematical tools
- select the correct statistical test and apply it to a given data set
- communicate experimental findings, data and concepts effectively to a diverse audience utilizing a range of formats such as laboratory reports, scientific posters and oral presentations
- work and learn in both individual and collaborative ways, with others of diverse abilities
- demonstrate an ethical approach to physiological and pharmacological research

6. Course Content and Schedule Fall Schedule

Week	Dates	Topic	Instructor
1	Sept 5–8	No class	
2	Sept 9–15	R1-W1: Welcome and intro lecture; Q&A Lab book activity; Microscopy techniques	Dr. Birceanu Hailey Hunter
3	Sept 16–22	R1-W2: Ethics in animal research talk; Intro talk about experiments; Making worm water; Pipetting exercise	и
4	Sept 23-29	R1-W3: Generating a standard curve	ii
5	Sept 30-Oct 6	R1-W4: Experimental week – toxicity tests on planaria + TFM	ш
6	Oct 7–13	R1-W5: R intro talk; Data analysis	"
7	Oct 14–20	Reading Week	N/A
8	Oct 21-Oct 27	R1-W6: Brochure info; Writing time in lab	u
9	Oct 28–Nov 3	R2-W1: Experiment background & hypothesis generation	Various instructors
10	Nov 4–10	R2-W2: Experimental data collection	"
11	Nov 11–17	R2-W3: Experimental data collection	íí.
12	Nov 18–24	R2-W4: Experimental data collection	
13	Nov 25-Dec 1	R2-W5: Data analysis	
14	Dec 2–6	R2-W6: In class poster presentation	

Winter Schedule

Week	Dates	Topic	Instructor
1	Jan 6–12	R3-W1: Experiment background and hypothesis generation	Various instructors
2	Jan 13–19	R3-W2: Experimental data collection	"
3	Jan 20–26	R3-W3: Experimental data collection	ш
4	Jan 27–Feb 2	R3-W4: Experiments/Data analysis	tt
5	Feb 3–9	R3-W5: Data analysis, Long-report guidelines	α
6	Feb 10–16	R3-W6: Writing time in lab	"
7	Feb 17–23	Reading Week	N/A
8	Feb 24-Mar 2	R4-W1: Experiment background and hypothesis generation	Various instructors
9	Mar 3–9	R4-W2: Experimental data collection	"
10	Mar 10–16	R4-W3: Experimental data collection	"
11	Mar 17–23	R4-W4: Data analysis	"
12	Mar 24–30	R4-W5: Oral presentation preparation	íí.
13	Mar 31–Apr 4	R4-W6: Oral presentations	11

7. Participation and Engagement

- ☑ Students are expected to participate and engage with content as much as possible
- Students are expected to participate during laboratory sessions, during meetings with their group members and on Microsoft Teams, as we will be working with shared data sets during lab time
- Students are expected to have their laboratory book with them for every laboratory session and to make notes on experiments and data collections

8. Assessment and Evaluation

Assessment	Format	Weighting	Due Date	Flexibility
Toolboxes Quiz	Multiple	5%		The weight of any
from Toolbox 1, 2 and 3	choice		Sept 27 th at 6:00 p.m.	Quizzes that are not completed will be added to the weight
Serial dilution quiz	Fill in the table	2.5%	Oct 4 th at 6:00 p.m.	of Assignment 1. No documentation or
Statistics module quiz	Multiple choice	2.5%	Oct 11 th at 6:00 p.m.	academic consideration is required.
Short report intro & methods	Written assignment	Completion#	Oct 11 th at 6:00 p.m.	
Rotation 1: short report	Written assignment	10%	Oct 25 th at 6:00 p.m.	72 hour no late penalty
Lab book	Written	1.25%	Oct 25 th 6:00 p.m.	
#Completion	Written		All components must be submitted	
Total Rotation 1		22.50%		
Rotation 2 pamphlet	Written assignment	5%	Dec 3 rd /4 th in lab	72 hour no late penalty

Poster	Poster group	10%	Dec 3 rd /4 th in lab	Not applicable
presentations	presentation			
Lab book	Written	1.25%	Dec 6 th at 6:00 p.m.	72 hour no late penalty
ASSIGNMENT 1	Written	10%	Opens Nov 15 th at 8:00 a.m. Due Nov 22 nd at 6:00 p.m.	Take-home – one week to complete 72 hour no late penalty
Total Rotation 2		26.25%		
Long report intro+references	Written	Completion#	End of lab session on R3-W3	
Long report methods	Written	-	End of lab session on R3-W4	
Long report results	Written	-	End of lab session on R3-W5	
Rotation 3 long report	Written report	20%	Feb 14 th at 6:00 p.m.	72 hour no late penalty
Lab book	Written report	1.25%	Feb 14th at 6:00 p.m.	perialty
#Completion	Written	1.25%	Various deadlines - See above – all components must be submitted for full marks	
Total Rotation 3		22.50%		
ASSIGNMENT 2	Written	10%	Opens Mar 14 th at 8:00 a.m. Due Mar 21 st at 6:00 p.m.	Take-home – one week to complete 72 hour no late penalty
Oral presentations	Seminar style presentation	15%	April 1st/2nd in lab	Not applicable
Lab book	Written	1.25%	April 4th at 6:00 p.m.	72 hour no late penalty
Total Rotation 4		26.25%		
PRACTICUM	In person	2.5%	Any time after Week 3 of the course; Absolute deadline is April 4 th 2025 by 12:00 p.m.	Flexible – you schedule your own time during the course
COURSE TOTAL		100%		

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 assessments have been designated as requiring supporting documentation:

- Poster presentation Due Dec 3 and 4 in lab
- Oral presentation Due April 1 and 2 in lab

Information about flexibility in assessment

- Any deviations from the above deadlines will be communicated directly to the students.
- Flexibility in assessment has been applied to this course; therefore, academic consideration requests may be denied on the assessments where flexibility is included

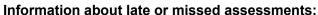
- This course has 3 quizzes. Any quizzes that are missed will have their weight shifted to Assignment 1.
- This course employs flexible deadlines for assignments. The assignment deadlines can be found above in the course outline. For each assignment, students are expected to submit the assignment by the deadline listed. Should illness or extenuating circumstances arise, students are permitted to submit their assignment up to 72 hours past the deadline without a late penalty. Should students submit their assessment beyond 72 hours past the deadline, a late penalty of 10% 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 deadline. The instructor reserves the right to deny such academic considerations, given the deadline 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 deadline. Note that weekend days and holidays are counted as regular days. Therefore, for a Friday deadline at 6:00 p.m., the 72 hour extension will take you to a Monday deadline by 6:00 p.m.
- This course gives you an essay credit. While flexibility in assessments is given throughout the course, the Short Report in Rotation 1 and the Long Report in Rotation 3 (highlighted in the table above) <u>must be submitted</u> and a passing grade must be achieved in each for you to pass this course.
- The practicum must be completed by all students. You have the entire year to sign up for it when you are ready. All students must complete the practicum or a mark of 0 will be assigned. There will be no re-weighing of the practicum to another assessment in the course.

General information about assessments

- All work marked "Completion" needs to be completed to get the full 1.25% completion mark. There will be no exceptions.
- All assignments are due at 6:00 p.m. EST 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 Turnitin (statement in policies below)
- ☑ Students will have unlimited submissions to Turnitin
- Rubrics will be 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
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days
- Any grade appeals on course assessments must be received within 3 weeks of the grade being posted.
- Efforts will be made to ensure that 15% of your course grade will be evaluated and returned 3 days prior to the drop deadline (statement in policies below).

Click <u>here</u> 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
Α	80-89	Superior work which is clearly above average
В	70-79	Good work, meeting all requirements, and eminently satisfactory
С	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail



✓ Office hours will be group office hours.

 $\ensuremath{\overline{\square}}$ For individual office hours, please contact the instructor directly.

	11110111	lation about late of missed assessments.
	\checkmark	Late assessments without academic consideration will be subject to a late penalty of 10 %/day
	\checkmark	An assessment cannot be submitted after it has been returned to the class; the weight may be transferred to a different assessment of similar weight and format.
	V	Attendance is mandatory in this course. If you miss 2 or more weeks of one rotation of the course without academic consideration, you will not be permitted to submit the evaluation for that rotation.
	V	If either Assignment 1 or Assignment 2 are missed and academic consideration has been provided, the weight of the missed assignment will be transferred to the other. If a student with academic consideration misses a group presentation, they must make arrangements with the course instructor for an alternate evaluation.
	V	All course components (assignments, reports, presentations, lab book submissions, practicum) must be completed to pass the course. The short report and the long report must be completed and passed to receive credit in this course. If these two assignments are missed or if the student received a failing grade on either of these components, the student will not receive credit for this course.
	\checkmark	The weight of the practicum cannot be shifted to another assessment. If the practicum is not completed, a mark of 0 will be assigned.
	V	If a student does not complete the short report and the long report or receives a failing grade on either of these evaluations, an INC will be assigned in the course. The student will be able to complete these evaluations the next time the course is offered.
	consul assign comple	ncomplete Standing): If a student has been approved by the Academic Advising Office (in tation with the instructor/department) to complete term work at a later date, an INC will be ed. Students with INC will have their course load in subsequent terms reduced to allow them to ete outstanding course work. Students may request permission from Academic Advising to carry ourse load for the term the incomplete course work is scheduled.
	Specia assign doesn' Acade	Special examination): If a student has been approved by the Academic Advising Office to write a Examination and the final exam is the only outstanding course component, an SPC will be ed. If the class has a makeup exam, the student is expected to write the makeup exam. If the class t have a makeup exam or the student misses the makeup exam for reasons approved by the mic Advising Office, the student will write the exam the next time the course is offered. Outstanding will reduce the course load for the term the exam is deferred as outlined in Types of Examinations
9.	Comm	unication
	√	Students should check the OWL Brightspace site every 24–48 hours Students should email their instructor(s) and teaching assistant(s) using MS Teams (preferred) or email
	√	Emails/MS Teams will be monitored daily; students will receive a response in 24–48 hours This course will use Brightspace and MS Teams.
	\checkmark	Students should post all course-related queries on Teams so that everyone can access the questions and responses
10.	Office	Hours
	\checkmark	Office hours will be held remotely on Fridays from 2:00 p.m. – 3:00 p.m.

11. Resources

- Students are responsible for buying their own lab books and bringing them to the laboratory for note taking and evaluations.
- All resources will be posted in OWL Brightspace
- Additional resources will be posted in your respective MS Teams for your specific experiment

12. Professionalism & Privacy

Western students are expected to follow the <u>Student Code of Conduct</u>. 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
- Students will be expected to take an academic integrity pledge before some assessments

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 rightsbased, 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. 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.
- 2. Make it a daily habit to log onto OWL Brightspace to ensure you have seen everything posted to help you succeed in this class.
- 3. Follow checklists created on OWL Brightspace or create your own to help you stay on track.
- 4. Take notes as you go through the lesson material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.
- 5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
- 6. 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).
- 7. 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

Students must familiarize themselves with the Policy on <u>Academic Consideration – Undergraduate</u> <u>Students in First Entry Programs</u>

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the <u>central academic consideration portal</u>. Students are permitted one academic consideration request per course per term <u>without</u> supporting documentation. Note that supporting documentation is <u>always</u> 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 <u>designate</u> 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 <u>Student Medical Certificate</u> or, where that is not possible, equivalent documentation by a health care practitioner.

Accommodation for Religious Holidays

Students should review the policy for <u>Accommodation for Religious Holidays</u>. 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.

Special Examinations

B. Academic Offenses

Scholastic offences are taken seriously, and students are directed $\underline{\text{here}}$ to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

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 or review
The policy on Accommodation for Students with Disabilities">https://example.com/html/>
The policy on 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. You can read about the privacy and security of the UWO email accounts here.

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. The details of this policy and the deadlines can be found here.

F. Essay Course Guidelines

The guidelines for the minimum written assignments refer to the cumulative amount of written work in a course but excludes written work in examinations. You can read about essay course guidelines <u>here</u>.

An essay course must normally involve total written assignments (essays or other appropriate prose composition, excluding examinations) as follows:

- Full course (1000 to 1999): at least 3000 words
- Half course (1000 to 1999): at least 1500 words
- Full course (2000 and above): at least 5000 words
- Half course (2000 and above): at least 2500 words

The structure of the essay course must be such that in order to pass the course, the student must exhibit some minimal level of competence in essay writing and the appropriate level of knowledge of the content of the course.

G. Turnitin and other similarity review software

All assignments will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. Students will be able to view their results before the final submission. 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 <u>Turnitin.com</u>.

15. BMSUE Academic Policies and Statements

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. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

Copyright and Audio/Video Recording Statement

Course material produced by faculty is 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.

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* on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.45 becomes 74, and 74.50 becomes 75. Marks WILL NOT be bumped to the next grade or GPA, e.g., a 79 will NOT be bumped up to an 80, an 84 WILL NOT be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark "bumping" will be denied.

Statement on the use of Generative Artificial Intelligence (AI) Platforms

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.

16. Support Services

- Students who are in emotional/mental distress should refer to Mental Health @Western Health https://www.uwo.ca/health/ for a complete list of options about how to obtain help.
- 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)
 - o Appeal Procedures
 - o Registrarial Services
 - Student Development Services
 - o Student Health Services

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:

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