

Department of Physiology and Pharmacology
The Introduction to the Integration of Physiology and Pharmacology-PhysPharm 2000

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 Requirements:



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. Bell	cwitche@uwo.ca

Instructor(s) or Teaching Assistant(s)	Contact Information
Dr. Crowley	fcaetano@uwo.ca
Dr. Birceanu	obircean@uwo.ca
Dr. Johnston	kjohnst9@uwo.ca
Dr. Woods	anita.woods@uwo.ca
Dr. Beye	abeye2@uwo.ca
Dr. Oke	soke2@uwo.ca
Dr. Dagnino	ldagnino@uwo.ca
Kelly Zhou	xzhou377@uwo.ca
Garth Blackler	gblackle@uwo.ca

Course Description and Design

Delivery Mode: Blended – This course is primarily in person, with online content available through the OWL site most weeks.

Students will study the physiological processes and pharmacological treatments of nerve, muscle, central nervous system, renal, cardiovascular, respiratory, endocrine, reproductive and gastrointestinal control systems as they function in living humans, under both healthy and diseased conditions. Antirequisite(s): Physiology 1020, Physiology 1021, Physiology 2130, Physiology 3120, Pharmacology 2060A/B, Pharmacology 3620. Extra Information: 3 lecture hours/week. Recommended background: any 1000-level course in biology, and any 1000-level course in chemistry.

Timetabled Sessions

Component	Date(s)	Time
Lecture	M/W/F	11:30 AM -12:20 PM

- Asynchronous pre-lecture material must be completed prior to sessions
- An audio recording of the sessions will be provided for 1 week post lecture and will be re-posted at the beginning of the FINAL exam study period only.
- Closed captioning will be provided on audio recordings
- Attendance at lecture is expected
- In-person activities must be completed in person and by the end of lecture

All course material will be posted to OWL: <https://westernu.brightspace.com/d2l/login>. Any changes 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.

4. Learning Outcomes

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

- Explain concepts and principles regarding the function of the human body, its organ systems, and how pharmacological agents function to affect the body.
- Describe the principles that determine how pharmacological agents get into and are handled by the body.
- Explain the principles that determine how pharmacological agents act in the body to produce a pharmacological effect.
- Identify the main therapeutic actions and side effects of pharmacological agents commonly used in clinical practice, and how they alter the function of one or more physiological systems.
- Integrate information from multiple organ systems and describe how they maintain homeostasis.
- Apply knowledge to clinical and disease situations by predicting consequences of alterations to normal physiological function, and how pharmacological agents act to restore physiological processes.

5. Course Content and Schedule

Fall Schedule

		Date	Lecturer	Topic
Week 1	1	Sept. 6	Dr. Bell	→ Pre-lecture learning: Exam study aide (Crib sheet/cheat sheet) Physiology & Pharmacology Basics Overview
Week 2	2	Sept. 9	Dr. Bell	→ Pre-lecture learning: The cell and pH Cell membrane & Transport mechanisms
	3	Sept. 11	Dr. Bell	→ Pre-lecture learning: Body compartments Body fluid compartments/Osmosis/Concentration Gradients
	4	Sept. 13	Dr. Crowley	Pharmacokinetics
Week 3	5	Sept. 16	Dr. Crowley	Routes of Drug Administration
	6	Sept. 18	Dr. Crowley	Pharmacodynamics
	7	Sept. 20	Dr. Bell	→ Pre-lecture learning: Endocrine overview Endocrine Overview
Week 4	8	Sept. 23	Dr. Bell	Pancreas (type I & II diabetes, diabetes mellitus treatments)
	9	Sept. 25	Dr. Bell	ACTIVE LEARNING: Receptors and Endocrine
	10	Sept. 27	Dr. Bell	Hypothalamus & Pituitary
Week 5		Sept. 30		National Day of Truth and Reconciliation- No Lecture
	11	Oct. 2	Dr. Bell	Thyroid gland
	12	Oct. 4	Dr. Bell	Adrenal glands & SAIDs
Week 6	13	Oct. 7	Dr. Bell	Reproductive System – Spermatogenesis
	14	Oct. 9	Dr. Bell	→ Pre-lecture learning: Menstrual cycle Reproductive System – Oogenesis
	15	Oct. 11	Dr. Bell	Reproductive System – Birth control
Week 7		Oct. 14-18		Reading Week – no lecture
Week 8	16	Oct. 21	Dr. Bell	ACTIVE LEARNING: Consolidate Endocrine System
	17	Oct. 23	Dr. Birceanu	→ Pre-lecture learning: Membrane potentials Membrane & Action Potentials
	18	Oct. 25	Dr. Birceanu	→ Pre-lecture learning: Action potentials Action potential propagation
Week 9	19	Oct. 28	Dr. Birceanu	→ Pre-lecture learning: Summation EPSPs & IPSPs – Temporal vs Spatial summation
	20	Oct. 30	Dr. Birceanu	→ Pre-lecture learning: Muscle overview Muscle 1 – Anatomy
	21	Nov. 1	Dr. Birceanu	→ Pre-lecture learning: Nerve and muscles Muscle 2 – Excitation-Contraction Coupling
Week 10	22	Nov. 4	Dr. Birceanu	→ Pre-lecture learning: Muscles and bones Muscle 3 – Sliding Filament Theory
	23	Nov. 6	Dr. Birceanu	ACTIVE LEARNING: Consolidate Nerve/Muscle systems
	24	Nov. 8	Dr. Birceanu	Pain, Opioids, NSAIDs, desensitization
Week 11	25	Nov. 11	Dr. Birceanu	ANS
	26	Nov. 13	Dr. Johnston	Sensory – Homunculus
	27	Nov. 15	Dr. Johnston	Sensory – Vision
Week 12	28	Nov. 18	Dr. Johnston	Sensory – Hearing and Vestibular Reflex
	29	Nov. 20	Dr. Woods	→ Pre-lecture learning: Digestion overview prep Digestive overview
	30	Nov. 22	Dr. Woods	Stomach physiology and pharmacology
Week 13	31	Nov. 25	Dr. Woods	Small and large intestines
	32	Nov. 27	Dr. Woods	→ Pre-lecture learning: Accessory organs Intestine, pancreas, liver and gallbladder function
	33	Nov. 29	Dr. Woods	ACTIVE LEARNING: Consolidate Gastrointestinal System
Week 14	34	Dec. 2	Dr. Woods	Drug metabolism, ENS, and phases of digestion
	35	Dec. 4	Dr. Woods	→ Pre-lecture learning: Nutrients Nutrient absorption

	36	Dec. 6	Dr. Woods	Lipid absorption and hyperlipidemia
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Winter Schedule

Week 1	38	Jan. 6	Dr. Beye	→ Pre-lecture learning: Cardiovascular anatomy Cardiovascular Overview
	39	Jan. 8	Dr. Beye	→ Pre-lecture learning: Cardiac cycle prep Cardiac Cycle
	40	Jan. 10	Dr. Beye	Nervous control of the heart
Week 2	41	Jan. 13	Dr. Beye	Beta-blocker pharmacology
	42	Jan. 15	Dr. Beye	Cardiac arrhythmias and anti-arrhythmic drugs
	43	Jan. 17	Dr. Beye/Bell	ACTIVE LEARNING: Consolidate Cardiac System
Week 3	44	Jan. 20	Dr. Beye	→ Pre-lecture learning: Blood vessels Resistance to blood flow
	45	Jan. 22	Dr. Beye	Blood vessel structure & bulk flow
	46	Jan. 24	Dr. Beye	Myogenic and metabolic theory, ACE inhibitors
Week 4	47	Jan. 27	Dr. Beye	Blood clotting & anti-coagulants
	48	Jan. 29	Dr. Beye/Bell	ACTIVE LEARNING: Consolidate Cardio-vascular System
	49	Jan. 31	Dr. Oke	→ Pre-lecture learning: Renal overview prep Renal overview
Week 5	50	Feb. 3	Dr. Oke	→ Pre-lecture learning: Tubular overview Renal function and tubule transport
	51	Feb. 5	Dr. Oke	Renal transport and drug excretion
	52	Feb. 7	Dr. Oke	Water balance & diuretics
Week 6	53	Feb. 10	Dr. Oke	Sodium regulation
	54	Feb. 12	Dr. Oke	ACE inhibitors, ARBs
	55	Feb. 14	Dr. Oke	ACTIVE LEARNING: Consolidate Renal System
Week 7		Feb. 15-23		Reading Week
Week 8	56	Feb. 24	Dr. Beye	→ Pre-lecture learning: Respiratory anatomy Respiratory overview
	57	Feb. 26	Dr. Beye	→ Pre-lecture learning: Lung function measurements Lung health and disease
	58	Feb. 28	Dr. Beye	Inhaled medications to treat asthma and COPD
Week 9	59	Mar. 3	Dr. Beye	Partial pressures of gases
	60	Mar. 5	Dr. Beye	Carbon dioxide transport
	61	Mar. 7	Dr. Beye	→ Pre-lecture learning: Ventilation, metabolism, and gas exchange Regulation of Respiration
Week 10	62	Mar. 10	Dr. Beye	ACTIVE LEARNING: Consolidate Respiration System
	63	Mar. 12	Dr. Birceanu	Antimicrobials I
	64	Mar. 14	Dr. Birceanu	Antimicrobials II
Week 11	65	Mar. 17	Dr. Birceanu	Antimicrobials III
	66	Mar. 19	Dr. Dagnino	→ Pre-lecture learning: Genes, alleles, and epigenetics Cancer/Chemotherapy I
	67	Mar. 21	Dr. Dagnino	Cancer/Chemotherapy II
Week 12	68	Mar. 24	Dr. Dagnino	Cancer/Chemotherapy III
	69	Mar. 26	Dr. Dagnino	Cancer/Chemotherapy IV
	70	Mar. 28	Dr. Bell	Integrative Physiology & Pharmacology I – Pregnancy
Week 13	71	Mar. 31	Dr. Bell	Integrative Physiology & Pharmacology II – Drug-Drug interaction
	72	Apr. 2	Dr. Bell/Beye/ Woods	Integrative Physiology & Pharmacology III – review of physiology with a circadian clock framework
	73	Apr. 4	Dr. Bell	ACTIVE LEARNING: Consolidate antimicrobials, cancer chemotherapy, integrative lectures

6. Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students can also participate by interacting in the OWL discussion forums with their peers and instructors

7. Assessment and Evaluation

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

Assessment	Format	Weighting	Due Date	Make-up Date
Assignments	In-Class Group and Individual Assignments	2% each for 16% total. Lowest grade dropped	Sep 18, Oct 11, Nov 6, Nov 29, Jan 17, Jan 29, Feb 14, Mar 10, Apr 4	No make-up assignments will be provided
Midterm 1 (Lectures 1-17)	Multiple choice and Short Answer	10%	Nov 1 from 6-7 PM (1 hour)	Nov 7 from 6-7 PM
Midterm 2 (Lectures 18-37)	Multiple choice and Short Answer	20%	Dec Exam Period (2 hour)	Usually the first week in Jan.
Midterm 3 (Lectures 38-55)	Multiple choice and Short Answer	20%	Feb 28 from 6-8 PM (2 hour)	Mar 6 from 6-8 PM
Final Exam (cumulative: ~60% lectures 56-73; 40% material lectures 1 to 55)	Multiple choice and Short Answer	34%	Apr Exam Period (2.5 hours)	Usually the second week of May

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:

- **Midterm 1 on November 1, 2024**
- **Midterm 3 on February 28, 2025**

Information about flexibility in assessment

- Flexibility in assessment has been applied to this course; therefore, academic consideration requests may be denied on the assessments where flexibility is included. This includes all 9 learning activities.
- There are 9 learning activities and the lowest mark out of the 9 will be dropped. If a learning activity is missed, email Dr. Bell (cwitche@uwo.ca) with a valid accommodation request within 7 days and the weight of the assignment will be distributed across all other assignments. Four learning activities must be completed to pass the course.

General information about assessments

- All assignments are due at end of lecture unless otherwise specified.
- Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could result in a 0.
- 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 assignments or midterms must be received within 3 weeks of the grade being posted.
- ✓ 15% of your course grade will be evaluated and returned 3 days prior to the drop deadline, which is Dec. 2, 2024 (statement in policies below).
- ✓ Students will be allowed to use crib sheets (Note card aide, also referred to as a 'cheat sheet', although please know, using the crib sheet is NOT cheating in this course) for all tests and exams as outlined by Dr. Bell on the Brightspace page.

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:

- ✓ Email Dr. Bell (cwitche@uwo.ca) with valid accommodation requests (see page 8 for details) for missed in-class assignments. These requests must occur within 7 days of the in-class assignment, otherwise, a zero will be given.
- ✓ Contact your faculty's academic advising office for all other exam accommodation requests.
- ✓ Missed assessments without accommodation will be given a zero.
- ✓ Missed in-class assignments with an accommodation will have the weight moved to the remaining in-class assignments.
- ✓ Minimum of **four** in-class assignments must be completed.
- ✓ One make-up Midterm or Exam will be offered and will occur in a format of Dr. Bell's choosing. This could mean that the make-up exam is not in the same format as the original exam.
- ✓ At least 2 of the 3 Midterms must be completed to pass the course. If not completed and accommodations have been granted, then an INC will be placed on the student record and the student will be given the opportunity to complete it the next time the course is offered.
- ✓ If one of the Midterms is not completed, and an accommodation has been granted for both the original midterm and the make-up, then the weight of that midterm will be moved to the final exam.
- ✓ If a student is unable to attend the make-up exams in person, they will have to seek an accommodation through Academic Advising. Please note, travel is NOT an accommodated reason to miss a make-up. Exams will NOT be proctored online in the event a student is unable to attend in person.
- ✓ **Students must pass at least one of the three midterms or final exam to pass the course.**

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. 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 exam or the student misses the makeup exam for reasons approved by the Academic Advising Office, the student will write the exam the next time the course is offered. Outstanding SPCs will reduce the course load for the term the exam is deferred as outlined in [Types of Examinations](#) policy.

8. Communication

- Students should check the OWL Brightspace site every 24–48 hours
- Students should email their instructor(s) using email
- Student should connect with teaching assistant(s) through OWL Brightspace discussions.
- Emails will be monitored daily, Monday to Friday; students will receive a response in 24–48 hours between the hours of 8:30 AM-4:30 PM, Monday to Friday.
- This course will use discussions on Brightspace for content questions.
- Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

9. Office Hours

- Group office hours will be held on Mondays from 1-1:30 PM. Due to the nature of the professorate office hours may be cancelled. Please check the office hour page to see if office hours are offered prior to attending.
- Office hours will be drop in
- Office hours will be held on Zoom
- Individual office hours can be booked by request through email to Dr. Bell (cwitche@uwo.ca).

10. Resources

- All resources will be posted in OWL Brightspace

11. 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).

12. 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.

13. Western Academic Policies and Statements

A. Absence from Course Commitments

Students must familiarize themselves with the Policy on [Academic Consideration – Undergraduate Students in First Entry Programs](#)

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.

Accommodation for Religious Holidays

Students should review the policy for [Accommodation for Religious Holidays](#). 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

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. These dates as well as other important information about examinations and academic standing can be found [here](#).

B. Academic Offenses

Scholastic offences are taken seriously, and students are directed [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](#)

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. 15% Rule

According to the [Evaluation of Academic Performance](#) policy, at least three days prior to the deadline for withdrawal from a 1000- or 2000-level course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. Generally, students can expect some form of feedback on their performance in a course before the drop date. In rare instances, at the Dean's discretion, an exemption can be

issued, which also must be noted in the course syllabus. Deans should review exemptions on a course-by-course basis each time an exempted course is offered.

14. 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

Pertaining to In-Class Learning Activities: 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.

15. 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 \(Science and Basic Medical Sciences\)](#)

- [Appeal Procedures](#)
- [Registrarial Services](#)
- [Student Development Services](#)
- [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.