

Biochemistry 4955E:

Community-Engaged Learning and Research Skills in Translational Cancer Biology

Course Syllabus for Fall 2026/Winter 2027



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/services should you need them.

1. Technical Requirements:



Stable internet
connection



Laptop or computer



Working microphone



Working webcam

2. Important Dates:



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
September 9	October 10–18	December 9	December 10	December 11–22

September 30, 2026: National Day for Truth and Reconciliation; non-instructional day

September 17, 2026: Last day to add or drop a Fall/Winter 24-week course

Classes Resume	Reading Week	Classes End	Study day(s)	Exam Period
January 4	February 13–21	April 9	April 10, 11	April 12–30

February 1, 2027: Last day to withdraw from a Fall/Winter 24-week course without academic penalty

3. Contact Information

Course Coordinator	Contact Information
Rayyan Syed Kamal	rkamal7@uwo.ca

Instructor(s) or Teaching Assistant(s)	Contact Information
Rayyan Syed Kamal – Instructor	rkamal7@uwo.ca
Siyun Kuang – Teaching Assistant (Fall/Winter)	skuang7@uwo.ca
Timothy Wu – Teaching Assistant (Fall term)	twu383@uwo.ca
Guneet Tyagi – Teaching Assistant (Winter term)	gttyagi3@uwo.ca

4. Course Description and Design

Delivery Mode: Blended; mostly in person with some online components related to work on community-engaged learning projects and/or external guest speakers.

This capstone course focuses on translation of cancer research into clinical practice; emphasizing interdisciplinary approaches, critical thinking, research design, and evaluation of literature. A community-engaged learning component connects small groups of students with relevant community partners. Students engage independently and collaboratively in authentic learning experiences and practice critical reflection.

Anti-requisites: Biochemistry 4483E, Medical Sciences 4995E, the former Biochemistry 4455G, the former Biochemistry 4486E.

Pre-requisites: Biology 2581A/B, Biochemistry 3381A, and registration in Year 4 of the Honours Specialization in Biochemistry and Cancer Biology (or with special permission).

Pre- or Co-requisite(s): Biochemistry 4450A (or with special permission: Anatomy & Cell Biology 4461B or Pharmacology 4360A/B).

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.

NO REQUIRED TEXTBOOK

Timetabled Sessions

Component	Date(s)	Time
Lecture	Monday	1:30pm – 2:20pm
Tutorial	Thursday	1:30pm – 3:20pm

- ☒ Asynchronous pre-work must be completed **1 day prior** to sessions
- ☒ **Attendance at lecture and tutorial sessions is required**
- ☒ Missed work should be completed within **24 hours**
- ☒ While recordings may be provided for the online sessions, there is **no guarantee** of this
- ☒ For available session recordings, **closed captioning** will be provided whenever possible

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.

5. Learning Outcomes

The purpose of this capstone course is to provide state-of-the-art knowledge about the complex, multi-disciplinary field of cancer care and research. This is achieved through the delivery and discussion of information related to translational aspects of cancer research and treatment; where research discovered at the lab bench is translated into treatments that benefit cancer patients at the bedside. In addition, the Community Engaged Learning (CEL) aspects of the course integrate service to the community with specific course curriculum components in order to provide students with an opportunity to gain hands-on practical and professional experience.

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

1. Articulate the intersectionality between biochemical, pathophysiological, epidemiological, and psychosocial determinants underlying cancer as a multifaceted disease
2. Engage in project-based CEL projects with community partners to understand how issues related to cancer affect patients, their families and the healthcare system
3. Work collaboratively in teams to create professional, practical, and evidence-based deliverables to support cancer initiatives in the community
4. Critique primary scientific literature by summarizing the main findings and identifying the strengths, weaknesses, and limitations within a research study
5. Effectively communicate scientific and health literature to a broad audience, including non-experts, cancer patients, community partners, and peers

6. Course Content and Schedule

FALL TERM

(A) Monday Lectures: Professional Development in Experiential Learning

Week	Dates	Topic	Instructor
1	Sept 7	<i>Labour Day</i>	<i>N/A – No class</i>
2	Sept 14	Welcome to the EL Skills	Kamal
3	Sept 21	Critical Reflection	Kamal
4	Sept 28	Time Management and Professionalism	Kamal
5	Oct 5	Teamwork (project management, charters)	Kamal
6	Oct 12	<i>Thanksgiving Holiday & Reading Week</i>	<i>N/A – No class</i>
7	Oct 19	Information Literacy and Databases	Kamal
8	Oct 26	Literature Reviews	Campbell
9	Nov 2	Environmental Scan	McLean
10	Nov 9	<i>Reading Week</i>	<i>N/A – No class</i>
11	Nov 16	Generative AI	Guest
12	Nov 23	Giving and Receiving Feedback	McLean
13	Nov 30	Quantitative Research Methodology	Guest
14	Dec 7	Qualitative Research Methodology	Guest
15		EDID in Research	Kamal

(B) Thursday Tutorials: Translational Cancer Biology

Week	Dates	Topic	Instructor
1	Sept 10	Welcome & Course Overview	Rayyan Kamal
2	Sept 17	Multi-Disciplinary Models of Cancer Care	Guest
3	Sept 24	Introduction to Translational Cancer Research	Rayyan Kamal
4	Oct 1	Introductory Meetings with Community Partners	Community Partners, Rayyan Kamal
5	Oct 8	Translational Cancer Imaging	Guest
6	Oct 15	<i>Reading Week</i>	<i>N/A – No class</i>
7	Oct 22	Cellular and Molecular Imaging in Cancer	Guest
8	Oct 29	Physics and Radiation Therapy in Cancer	Guest
9	Nov 5	Clinical Trials in Oncology	Guest
10	Nov 12	CEL Project Inquiry and Implementation Presentations	Students and Rayyan Kamal
11	Nov 19	Translational Computational Research: Applications of 'Omics Technologies	Guest
12	Nov 26	Translational Computational Research: Applications of Artificial Intelligence (AI)	Guest
13	Dec 3	Fall Term Reflection Discussion	Students and Rayyan Kamal

WINTER TERM**(A) Monday Lectures: Professional Development in Experiential Learning**

Week	Dates	Topic	Instructor
1	Jan 4	Know Your Why and Mapping Skills	Guest
2	Jan 11	Interview Skills	Careers
3	Jan 18	Odyssey Planning	Careers
4	Jan 25	Personal Branding and Social Media	Kamal
5	Feb 1	Information Interviews and Networking	Kamal
6	Feb 8	CVs and Resumes	Careers
7	Feb 15	<i>Reading Week</i>	<i>N/A – No class</i>
8	Feb 22	ePortfolios	Kamal
9	Mar 1	Science Communication for Non-Experts	Kamal
10	Mar 8	Science Literacy and Misinformation	Guest
11	Mar 15	Mentorship	Kamal
12	Mar 22	Work/Life Balance	Kamal
13	Mar 29	Poster Showcase	N/A
14	Apr 5	<i>Study Break</i>	<i>N/A – No class</i>

(B) Thursday Tutorials: Translational Cancer Biology

Week	Dates	Topic	Instructor
1	Jan 7	Translational Aspects of Hematology Oncology & The Philosophy of Medicine	Ben Chin-Yee
2	Jan 14	Digital Pathology in Cancer Care and Research	Matt Cecchini
3	Jan 21	CEL Project Group Check-ins & Work Period	Rayyan Kamal
4	Jan 28	Translational Aspects of Radiation Oncology	Stephanie Gulstene
5	Feb 4	Translational Aspects of Medical Oncology	Ana Lohmann
6	Feb 11	Translational Aspects of Surgical Oncology	Armen Parsyan
7	Feb 18	<i>Reading Week</i>	<i>N/A – No class</i>
8	Feb 25	Cancer & Underserved Populations	Rayyan Kamal
9	Mar 4	The Patient Perspective – Interactive Panel Discussion	Patient Partners and Rayyan Kamal
10	Mar 11	Incorporating the Patient Perspective into Oncology Education	Rayyan Kamal
11	Mar 18	Careers in Oncology – Interactive Panel	Guest Panelists and Rayyan Kamal
12	Mar 25	Final Project Poster Presentations	Students and Rayyan Kamal
13	Apr 1	Winter Term Reflection Discussion & Course Wrap-Up	Students & Rayyan Kamal
14	Apr 8	<i>Work Period</i>	<i>N/A – No class</i>

7. Participation and Engagement

- ☒ Students are expected to actively participate in class discussions and engage with content as much as possible
- ☒ Students can also participate by interacting in the forums with their peers and instructors

8. Assessment and Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated. All assignments are due at **5:00pm EST** unless otherwise specified.

Assessment	Format	Weight	Due Date	Flexibility
Fall Post EL Session Reflective Quizzes (10 of 11 lectures)	Written (individual)	5%	Mondays at 11:55 PM after EL lectures	Not applicable
Fall Reflection Assignment: Translational Research	Written (individual)	7%	Oct 2, 2026	48-hour no late penalty
Literature Review: Topic Related to CEL Project	Written (individual)	10%	Oct 30, 2026	48-hour no late penalty
CEL Project Inquiry & Implementation Presentation	Oral (group)	10%	Nov 19, 2026	Not applicable

E-Portfolio Outline	Website (individual)	5%	Dec 4, 2026	48-hour no late penalty
Winter Post EL Session Reflective Quizzes (10 of 11 lectures)	Written (individual)	5%	Mondays at 11:55 PM after EL lectures	Not applicable
Position Paper: Controversial Topics in Cancer Research and Care	Written (individual)	10%	Feb 5, 2027	48-hour no late penalty
Winter Reflection: The Cancer Patient Perspective	Multimedia (individual)	8%	March 19, 2027	48-hour no late penalty
Poster Presentation: CEL Project & Deliverables	Oral/Poster (group)	10%	March 26, 2027	Not applicable
CEL Project Final Written Report & Deliverables	Written (group)	20%	April 6, 2027	Not applicable
Final E-Portfolio	Website (individual)	10%	April 6, 2027	48-hour no late penalty

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:

- CEL Project Final Written Report & Deliverables (Group Assignment); April 6, 2026

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 (see above table)
- ☒ 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 48 hours past the deadline without a late penalty for those assignments with this flexibility. Should students submit their assessment beyond 48 hours past the deadline, a late penalty of 2% 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.

General Information About Assessments

- ☒ All assignments are due at 5:00pm EST unless otherwise specified
- ☒ Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files can be subject to late penalties (see below) or a mark of zero.
- ☒ 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 assignments, quizzes, 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 (statement in policies below).

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 2% per day
- ☒ An assessment cannot be submitted after it has been returned to the class; instead, an alternate assessment or alternate grade weighting will be assigned
- ☒ All course components must be completed to pass the course unless alternative arrangements are made between the student and the instructor. If any elements are missing, students will receive an INC in the course but may complete the missing component the next time 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. 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.

9. Communication

- ☒ Students should check the OWL Brightspace site every 24–48 hours
- ☒ Students should email their instructors and teaching assistants using the email addresses provided on Page 1 of this syllabus
- ☒ Emails will be monitored daily; students will receive a response in 24–48 hours
- ☒ This course will use discussion forums on OWL Brightspace
- ☒ Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

10. Office Hours

- ☒ Regular office hours will not be held; please contact the instructors and teaching assistant by email to arrange meetings as needed.

11. Resources

- ☒ All resources will be posted in OWL Brightspace
- ☒ There is no required textbook or study guide

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
- ☒ All instructor-recorded sessions will remain within the course site or unlisted if streamed
- ☒ Students are expected to follow in-person and online etiquette expectations provided on OWL Brightspace. Note that disruptive behaviour of any type, including inappropriate use of the chat function in online sessions, is unacceptable and may result in disciplinary measures under the Student Code of Conduct
- ☒ Students may be expected to take an academic integrity pledge before 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 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. Success in this course is heavily dependent on participation in class and team discussions, and with keeping open lines of communication with your community partner, your team members, and the course coordinator/instructors.
2. Do not be afraid to ask questions. If you are struggling with a topic or your team project, check the online discussion boards and/or contact a member of the course teaching team - we are here to help!
3. Invest in a planner or app to keep track of your courses. Populate all your deadlines at the start of the term and schedule your time throughout the course.
4. Make it a daily habit to log onto OWL Brightspace to ensure you have seen everything posted to help you succeed in this class.
5. Follow checklists created on OWL Brightspace or create your own to help you stay on track.
6. 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.

7. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
8. 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).
9. 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 [Student Absence 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. These dates as well as other important information about examinations and academic standing can be found [here](#).

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. 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.

Policy: [Undergraduate Course Credit](#)

Procedures: [Discovery Credits](#)

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 [here](#).

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

6. Full course (1000 to 1999): at least 3000 words
7. Half course (1000 to 1999): at least 1500 words
8. Full course (2000 and above): at least 5000 words
9. 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 [Turnitin.com](https://www.turnitin.com).

H. 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 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. 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

Generative Artificial Intelligence (AI) tools such as ChatGPT are increasingly becoming publicly available. As with all new technological innovations, this brings both opportunities and challenges for educators and learners alike. Below are the guidelines, best practices, and potential risks for using ChatGPT and other generative AI tools in this course, should you choose to do so.

- ☒ Whenever an AI tool is used, it should always be acknowledged/cited.
- ☒ It is acceptable to use generative AI tools for getting started on assignments (e.g., overcoming procrastination!). This may include things like helping to clarify/explain difficult concepts, suggesting relevant papers and resources to get started on a literature or environmental scan, generating a writing outline for your assignment, or seeking multiple viewpoints/ideas about a particular topic.
- ☒ It is also acceptable to use AI tools to help you improve the quality of your writing. This may include things like proof-reading including tips to improve sentence structure, grammar, and word choice.
- ☒ It is **unacceptable** to use fully AI-generated text in assignments and misrepresent it as your own writing. This includes the use of full sentences, full paragraphs, and/or complete assignments written by an AI tool.
- ☒ Ultimately, **you (and you alone)** are always accountable for the content presented in your assignments, whether or not it was generated by AI. Furthermore, if you misrepresent yourself as the author of text that was generated by an AI tool, this may be considered a scholastic offence.

Remember that AI systems do not distinguish between reliable (factually correct) versus non-reliable (factually incorrect) sources of information. In addition, AI systems cannot understand empathy or emotion in the same way as a human being, something that is particularly relevant for the critical reflection components of this course. Finally, the knowledgebase of most AI systems is typically “western-centric”, which can result in misrepresentation, silencing or erasing of cultures, histories, and ways of knowing outside dominant western datasets. As a result, AI systems may produce biased discriminatory and/or skewed opinions and data that can amplify existing inequities, including in future datasets.

Further information and resources about the ethical use of ChatGPT and other generative AI tools can be found on the OWL Brightspace Course Site. You are strongly encouraged to review these resources before making the decision to use AI tools in this and other courses.

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 \(Science and Basic Medical Sciences\)](#)
 - [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.