Western Science

Department of Biology

Bio3601A: Animal Physiology Course Outline

1. Course Information

Course Information
3601A: Animal Physiology, Fall 2025,
Note: Labs will not be held every week. Watch OWL for details.

List of Prerequisites
A minimum mark of 60% in Biology 2601A/B.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department/Program Counsellors and Science Academic Advisors) 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.

2. Instructor Information

Instructors	Email	Office	Phone	Office Hours
Dr. Natasha Mhatre (Course Coordinator)	nmhatre@uwo.ca	Redacted	Redacted	Redacted
Jacob Smith (TA)	jsmit849@uwo.ca	NA	NA	NA
Kenique Stewart (TA)	kstew42@uwo.ca	NA	NA	NA

Contacting the instructor
I encourage you to come to me with questions and/or comments, or to discuss biology in general. This can often be done during **office hours** or by setting up an in-person appointment. You can also request office hours over Zoom.

If you would prefer a scheduled meeting, or my office hours do not fit your timetable, please email to arrange a mutually convenient time. I'll do my best to accommodate you, but please bear in mind that I run a lab. I have students and post-doctoral fellows, so appointments may only be available with 1-2 weeks' notice.

Please include "Bio 3601a" in the subject lines of any emails. For your own protection, please only send emails from your uwo account – I will delete emails about the course from non-uwo addresses, as well as emails that are impolite or written in the manner of a text message. As with all communication in the adult world, please begin your emails with a salutation ("Dear Dr. Mhatre") and end with some identifier of who you are ("Abigail P. Student"). I will not usually respond to e-mails received on weekends,

holidays or outside normal working hours, but will answer them as soon as possible on the next business day.

All course material will be posted to OWL: http://owl.uwo.ca. 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 Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800. Google Chrome or Mozilla Firefox are the preferred browsers to optimally use OWL; update your browsers frequently.

Professionalism & Privacy:

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

- ☒ Students are expected to follow online etiquette expectations provided on OWL,
- ☒ All course materials created by the instructor(s) are copyrighted and cannot be sold or shared,
- ☒ Recordings are not permitted (audio or video) without explicit permission,
- ☒ Permitted recordings are not to be distributed, sold or shared,
- ☒ All recorded sessions will remain within the course site or unlisted if streamed.
- ☒ The use of AI and LLM tools such as Chat-GPT is prohibited for this course.

3. Course Syllabus, Schedule, Delivery Mode

This course will cover a variety of topics, including allometry, ion and water balance, thermal biology, neurophysiology, endocrinology, and physiological responses to human environmental impacts. The goal is to understand how animals survive and thrive in a range of extraordinary terrestrial and aquatic environments.

Content will be covered through:

1. student-directed learning based on textbook chapters and online quizzes
2. lectures covering specific areas of interest for each topic,
3. lectures based on experimental design and evaluation,
4. in-class exercises that focus on integrating and applying knowledge from the lectures and readings,
5. & will be complemented by hands on labs which will focus on data acquisition, analysis and interpretation of datasets.

Together, this approach will allow students to address integrative-applied problemsin the exams.

Learning outcomes:

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

1) Distinguish physiological strategies and mechanisms and compare and contrast some of the strategies and mechanisms animals use to maintain ion and water balance, survive extreme temperatures, sense and respond to their environment, and coordinate physiological processes throughout the body.

2) Explain how physiological measurements can inform biological conclusions at proximate and ultimate levels of explanation.
3) Analyze a basic dataset in a physiological context and write a succinct and accurate conclusion based upon those data.
4) Apply basic physiological principles to critically evaluate an existing dataset.
5) Read a scientific paper in the general field of comparative animal physiology and critically evaluate the experimental design, methods, and data.
6) Design an experiment or experiments to address a physiological question that students have not previously encountered and clearly articulate that experiment in writing.

Please note that the focus of this course is on comparative animal physiology, and we will not cover biomedical or disease-model physiology. Courses on those topics are available through the basic medical sciences.

Course requirements

Please see the Western University Academic Calendar for pre- and anti-requisites. Students are responsible for ensuring they are qualified to be enrolled in this course. You are required to attend all lectures and your assigned labs, and to manage your time to allow you to read textbook chapters and complete quizzes by the deadlines.

In this course, I assume that you have passed Biology 2601a with a clear understanding (and memory!) of the material therein. You may have to revisit your notes (or additional textbook chapters) to keep up with the material in this course.

Course delivery- in person

- This course will be primarily in-person.
- There will be two in-person in-class quizzes which are mandatory.
- In the event we need to move online, we will use Zoom for previously in person components and Gradescope for in class tests and exercises.

Lectures in person

- Lectures will be held in class, in person. With some exceptions.
- Do not attend class if you are unwell. ***Where possible*** recorded lectures from previous years or updated versions will be made available on OWL.

Labs: in person

- The labs are mandatory. See below for absence policies.
- Each lab is worth 6%, and the assessments must be submitted online.
- You can finish the lab report in the analysis lab if you prepare ahead of time.

Contingency plan

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme may change. Any assessments affected will be conducted online as determined by the course instructor.

Methods of evaluation:

Item	Value	Due dates
4 Reading based **book quizzes** (Asynchronous OWL Quiz, Timed: 120 mins)	32% (8% each)	redacted
2 Lecture based **class quizzes** (Each section; In person, Timed: 40 mins)	18% (9%, 9%)	redacted
4 Lab reports (In person labs. Asynchronous, untimed assignments)	24% (6% each)	redacted
Final exam (In person, timed, 120 mins)	26%	redacted

To pass this course, you must get at least 50% (28/56) for the book quizzes + labs, and at least 50 % (22/44) in the class quizzes + final exam. If you need accommodation for the exams they will be made available.

Attendance of the labs is mandatory, and you will not receive any marks for missed labs without appropriate permission.

I will reopen quizzes for late submissions and leave them open 1 week after the deadline has passed. For late submissions, you will get only 1 attempt and the grade you earn, i.e. if you score >80%, I will not increase your grade to 100%. You are strongly advised to attempt the reading-based quizzes well before the deadlines to guard against computer failures or unexpected mishaps.

There will be no make-ups for the class quizzes, and your mark will be reweighed based on the other assessments, if you provide appropriate documentation through the accommodation's office. Remember, all other rules still apply, i.e. you must score a minimum of 50% in this section to pass.

4. Course Materials

This course will make extensive use of

Hill, R.W., Cavanaugh, D.J. & Anderson, M. (2021) Animal Physiology. 5th Edition. Sinauer, Sunderland, MA.

Note that this is the text you used in Biology 2601, so you may already own a copy. The text is available from the bookstore

1) in hardcover (a bit expensive at $171.35),
2) in pre-punched looseleaf (should be cheaper?),
3) a digital copy from our bookstore (cheaper at $90 if you rent it for 365 days)
4) OUP who publishes it also mentioned that you can get a further discount if you buy it from them directly, and you can get it for different lengths of time from this LINK

If you decide you like the text after purchasing the looseleaf version, you could probably get it bound on campus by graphic services. You may also be able to find better deals on the interwebs, or there may be an e-book available, too. The library may also have physical reserve copies available this fall.

You are welcome to use the earlier 4th edition of the text (or another animal physiology textbook), which you may already own or be able to buy second hand … ***however, if you choose to do so, you are responsible for figuring out what the readings are, and also to appraise yourself of any material that differs between editions. Watch out for changes in chapter numbers in the online edition as well!*** I have a few copies of the 4th edition that I am happy to lend to students who need them. Please return them at the end of the year, for next year's students.

Readings and online quizzes:

Animal physiology is a very broad field. At the 3000-level, you are expected to begin to develop both a breadth and depth of knowledge – much more so than can be covered in lectures (or studied for an exam!). For this reason, the breadth of knowledge in the topics covered in this class will come from self-directed learning (reading the textbook – and probably taking notes as well!). Your broad knowledge of this material will be assessed through online quizzes; although the material itself will not be tested directly in the exams, I will assume that it provides appropriate background for following the lectures, for understanding the labs and interpreting the data you collect, and finally for reading the research articles covered in lectures in that week. Thus, the material covered in the readings is implicitly required for much of the rest of the course. Doing the readings and the quizzes will help you to keep up with the lectures, and to allow you to make the most of lectures and labs. On the other hand, falling behind on the reading, will make the lectures and labs harder.

Your uptake of the readings will be assessed in four online quizzes, each worth 8% of your final grade. If you get more than 80% in the quiz, you will receive the full 8%. If you get less than 80%, you will receive a proportion of the 8% equivalent to your grade in the quiz. Each quiz will have 40 questions, and will be available on OWL. 120 minutes will be available for each quiz attempt, so you might like to think of it as an open-book exam.

In many ways, this mirrors the real-life way researchers and scientists use textbooks, so it's a good habit to develop. A useful suggestion for finding information is to always keep track of the headers within the chapter in your initial readings and notes, since headers are a way of analytically organising information and making it more manageable.

You can take the quiz up to three times, and your highest grade will be logged no matter the number of attempts. If you have no attempts, I will reopen the quiz for one more attempt for a week post the deadline, without the bump up from >80% to 100%.

Please note that the deadline for the quiz is firm. This means that if you miss the deadline without appropriate documentation covering the whole week prior to the deadline, then you will not get any marks for that quiz. I therefore suggest that you leave a lot of time to attempt the quiz, and do it earlier, rather than later. Technology-failure excuses such as "my internet connection died at the last moment", or unjustifiably last-minute excuses ("I got sick an hour before the deadline"… it's a 120 min test!) are not acceptable, so avoid exposing yourself to that risk.

Chapters for quizzes (from Hill, R.W., Cavanaugh, D.J. & Anderson, M. (2021) Animal Physiology. 5th print Edition. Chapter numbers may vary in the different editions, confirm you are reading the right chapter by using chapter titles.).

Quiz 1: Ion and Water Balance: 5, 27, 28, 29, pp682-685
- Chapter 5: Transport of Solutes and Water
- Chapter 27: Water and Salt Physiology of Animals
- Chapter 28: Water and Salt Physiology of Animals in their Environments
- Chapter 29 & pages 682-685: Acid-Base Physiology

Quiz 2: Thermal Biology: 10-11
- Chapter 10: Thermal Relations
- Chapter 11: Food, Energy and Temperature

Quiz 3: Neurophysiology: 12-15, 19
- Chapter 12: Neurons
- Chapter 13: Synapses
- Chapter 14: Sensory processes
- Chapter 15: Nervous System Organization and Biological Clocks
- Chapter 19: Control of Movement

Quiz 4: Endocrinology: 16-17
- Chapter 16: Endocrine and Neuroendocrine Physiology
- Chapter 17: Reproduction

Lectures:

The lectures in this course serve three purposes:

1. To provide the depth to match the breadth of material covered in the readings and quizzes
2. To introduce you to the process of carefully and critically reading and interpreting the primary literature
3. To provide a forum to practice thinking about the design and interpretation of experiments – highly relevant to your performance in both the labs and the exam.

Much of the material in these lectures will come directly from the primary literature – both up-to-the-minute journal articles and older classics. Basically, the lectures will serve as a series of case studies, and the coverage in the lectures is intended to allow you to understand these case studies. Hopefully, through this mechanism, you will also get a feeling for how one examines science critically, as well as how the information covered in textbooks is generated, and will prepare you to solve your own new scientific problems. This will also help you to solve the scientific problems posed in the exam (well – the questions will be based on things we've already discussed anyway!). In addition, the skill of reading and interpreting scientific literature will be helpful in other courses, in life as a researcher/ physician/ astronaut/ lawyer/ [insert career goal here] and as an informed citizen participating in society.

Attending lectures is **highly recommended**, since the exams will reflect the emphasis of the lectures (not always apparent from the posted Power-point files), and the material in the lectures is not necessarily covered in the textbook. Pre-recorded lectures from a previous year will be made available where they are available, but I may update material or change emphasis so there will not be an exact match. I recommend attending as there is typically a high correlation between attendance and the final grade. I will populate the weekly structure of the course in OWL and lectures will be opened as we go through the semester. In particular, pay attention to the pre-test discussions and the final exam lecture which will focus on the type of questions you can expect in both the lecture-based class quiz and the final exam!

Lecture PowerPoint files and PDFs will be posted to OWL: https://westernu.brightspace.com/

Students are responsible for checking the course OWL site (https://westernu.brightspace.com/) regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Labs:

There are four labs for this course with one session for the experimental part of the lab and another for the analysis part of the lab. In the experimental part, you will follow an experimental protocol and generate a dataset.
In the analysis part, you will practice analysing and interpreting data you and others have collected. You will use your knowledge from lectures and readings to draw biological conclusions. This will achieve two goals:

1. You will gain experience working with a variety of different experimental techniques and animals,
2. You will gain experience working with datasets in a way that integrates your knowledge from other parts of the course.
3. You will get practice describing biological conclusions in a clear, concise manner.

You will work in teams of two or four for the labs. In preparation for the experimental section of the lab, please read the protocol before you come to lab. Additionally bring a copy of the lab protocol and a soft copy of the datasheet (if available) that you can fill out and submit online at the end of the lab. You will need at least one computer between you and your lab partners to complete the labs. You will have to install software for the last two labs (Cricket neurophysiology lab and Daphnia endocrinology lab). Please remember to do so before the lab. Remember to have your data and required software with you for the analysis lab as well. You may find it helpful to bring your class notes and textbook to help you write your lab report.

Each lab is worth 6% in total. 2% of your mark will come from filling out the datasheet and/or submitting your data on the day of the experimental lab. The other 4% will come from a short lab report that you will submit via OWL – you can complete this in the analysis lab (better), or by the scheduled day of the deadline (less good). Note that this deadline is closer if you have a lab later in the week, but this should not matter, because with a little preparation you should be able to complete and submit your answer during your analysis session.

Turnitin.com Note that in this course I will require you to submit your lab reports to turnitin.com. In the unlikely event that you haven't come across it yet, turnitin.com is an anti-plagiarism tool that checks the text of your submission against the work of your classmates, the turnitin.com database (previous assignments submitted to turnitin.com) and **the entire internet**. This means that if you copy things from the internet (or form other students), you will be caught. Please be aware that turnitin.com is clever enough to detect plagiarism where a few words are changed in an attempt to make the passage 'different'.

And for the legalese:

Lab reports will be subject to submission to turnitin.com for textual similarity review by the commercial plagiarism software under license to the University. All documents submitted to the turnitin.com system will be included as source documents in the reference database for the purpose of detecting plagiarism in documents subsequently submitted to the system. Use of this service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Submitting lab reports:

- Submitting your lab report text will automatically upload it to turnitin.com.
- Note that by submitting the assignment, you are agreeing to the terms and conditions of turnitin.com (as negotiated by Western University), and also confirming that this copy is identical to that uploaded to turnitin.com.

Much of the lab material will be posted to OWL: https://westernu.brightspace.com/

Students are responsible for checking the course OWL site (https://westernu.brightspace.com/) regularly for news and updates. This is the primary method by which information will be disseminated to all students in the class.

If students need assistance with the course OWL site, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Lecture based quizzes:

There will be two lecture-based in-class quizzes in this course, which will occur during class time, in the room assigned for the course. The tests will be 40 minutes long. Each test is each worth 9% of your final mark.

The tests will consist of short answer questions, and some integrative questions. There will be some choice in which questions to answer, and each test will examine only that section of the course that immediately precedes them. The first test will cover 'Allometry', 'Ion and Water Balance' and 'Thermal Biology' and the second will cover 'Neurophysiology' and 'Endocrine physiology'. Expect these tests to be considerably more challenging than the online quizzes. The nature of the questions in these tests will differ considerably from the content-focused nature of the online quizzes, so do not assume that because you aced the quizzes with ease that you will find the exam and tests similarly straightforward. Do attend the pre-test discussion lectures which aim to prepare you for these tests and use office hours to ask questions if something is unclear! It what they are there for!

For the test, you are allowed to bring reference material. **However, this will consist of only a single letter-sized piece of paper.** Your notes must be handwritten, and you may use both sides. I reserve the right to inspect these documents. If you bring a document to the test that violates the rules, it will be confiscated and shredded.

If you are a student with a disability and require extra time accommodation, please ensure your accommodations are active on the Accommodated Exams website https://studentservices.uwo.ca/Accommodatedexamssignup/ for this course 10 days before the assessment.

The marks for the tests will be posted on OWL. The tests themselves will be available for review during office hours.

Lecture based final exam:

The cumulative final exam is worth 26% of the course. The exam will be based on the emphasis of material covered in the lectures (including the scientific papers) and will require you to integrate information and skills from all aspects of the course (however, you should concentrate your focus on the lecture material when studying). The exam will consist of short and paragraph answer questions, and will include quite a lot of choice, so don't be too overwhelmed by the breadth of material in the course. However, the final will be difficult because it will emphasize 'application' type questions. You should be well-prepared for this by the in-class discussion, and tests. The final exam like the tests will differ considerably from the content-focused nature of the online quizzes, so do not assume that because you aced the quizzes with ease that you will find the exam straightforward.

For the final exam also, you are allowed to bring reference material. **However, this will consist of only a single letter-sized piece of paper.** Your notes must be handwritten, and you may use both sides. I reserve the right to inspect these documents. If you bring a document to the test that violates the rules, it will be confiscated and shredded.

Technical Requirements

You will need a computer to be able to access the OWL website and also to do the OWL quizzes. You will need a computer to acquired data for some labs and you will also need a computer for data analysis.

5. Student absences

Missing a deadline, quiz, test, final exam, or lab assignment because of illness or other circumstances:

There are no make-ups for the lecture-based class quizzes, reading-based book quizzes or for the labs. If you miss an experimental lab, you need not attend the analysis lab. If you attend the experimental lab but miss the analysis lab, it is up to you to get notes from your classmates and finish the analyses to submit the report. If you can attend the analysis lab on another day with a different section, that is also acceptable. You cannot, however, change sections with the experimental part of the labs, since we have limited spaces.

Please take appropriate documentation to the accommodations office to be excused from the lab or quiz, the counselor will contact me directly. Note that because you should be attempting the reading-based book quiz well in advance, and your medical issue should cover the week before the deadline. Note that you are not required to provide any details of the reason for your absence to me (this is assessed confidentially in the Dean's office).

If your request is accepted and I hear from the counsellor, I will drop the grade for that assessment and reweigh your grade based on the remaining assessments. If you do not receive permission for missing the assessment, you will score a 0 on that section.

Being 'very busy' is not a good excuse. We are all busy, and for this reason I've set up all the deadlines in this course well in advance. And I have developed a very detailed course website and calendar to ensure you always have your eye on deadlines. Do try and manage your time in a way that allows you to meet them.

Absences from Final Examinations

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

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

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

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below. To provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible.

Students must familiarize themselves with the *University Policy on Academic Consideration – Undergraduate Students in First Entry Programs* posted on the Academic Calendar: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf,

This policy does not apply to requests for Academic Consideration submitted for **attempted or completed work**, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult Accessible Education.

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage:
https://registrar.uwo.ca/academics/academic_considerations/
All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline.

All Academic Consideration requests must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request **without supporting documentation** in this course.

When a student *mistakenly* submits their one allowed Academic Consideration request **without supporting documentation** for the assessments listed above or those in the **Coursework with Assessment Flexibility** section below, the request cannot be recalled and reapplied. This privilege is forfeited.

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under Special Examinations), especially for those who miss multiple final exams within one examination period.

Essential Learning Requirements
Even when Academic Considerations are granted for missed coursework, the following are deemed essential to earn a passing grade. To pass this course, you must get at least 50% (28/56) for the book quizzes + labs, and at least 50 % (22/44) in the class quizzes + final exam. If you need accommodations for the exams they will be made available. If you need accommodations for the exams they will be made available.

If you have missed an assessment and your request for academic consideration has been granted, since there will be no make-ups (except for the final exam), your grade will be reweighed. However, you still have to earn 50% in the book quizzes + labs, and 50% in the class quizzes + final exam.

6. Additional Statements

Religious Accommodation
When conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing to the course instructor and/or the Academic Advising office of their Faculty of Registration. This notice should be made as early as possible but not later than two weeks prior to the writing or the examination (or one week prior to the writing of the test).

Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

https://www.edi.uwo.ca.

Accommodation Policies
Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf.

Academic Policies
The website for Registrar Services is https://www.registrar.uwo.ca/.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

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 their official university address is attended to in a timely manner.

You can use a calculator in your exams, however, not a computer.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Support Services
Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic-related matters: https://www.uwo.ca/sci/counselling/.

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

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.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Learning-skills counsellors at Learning Development and Success (https://learning.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Additional student-run support services are offered by the USC, https://westernusc.ca/services/.

7. Land acknowledgment

We acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Attawandaron peoples, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g. First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.