

Neuroscience

Neuroscience 4986Y Honours Thesis Course Syllabus for Fall 2025/Winter 2026

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

1. Technical Requirements:



Stable internet connection



Laptop or computer

2. Important Dates:



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

September 30, 2025: National Day for Truth and Reconciliation and is a non-instructional day

September 12, 2025: Last day to add or drop a Fall 12-week course

December 1, 2025: Last day to withdraw from a first-term half course without academic penalty

Classes Resume	Reading Week	Classes End	Study day(s)	Exam Period
January 5	February 14–22	April 9	April 10–11	April 12–30

January 30, 2026: Last day to withdraw from a Fall/Winter 24-week course without academic penalty

3. Contact Information

Course Coordinator	Contact Information
Jessica Grahn	jgrahn@uwo.ca

Instructor(s) or Teaching Assistant(s)	Contact Information
Jessica Grahn (Course Instructor)	jgrahn@uwo.ca
Madison Longmuir (Teaching Assistant)	mlongmu@uwo.ca
Chung Yan Isis So (Teaching Assistant)	cso2026@meds.uwo.ca

4. Course Description and Design

Delivery Mode: in-person

In this course, students develop research literacy, critical thinking, and communication skills. Topics include animal and human research ethics and institutional approval of animal and human experimentation, laboratory safety, equity and diversity in research conduct, time management, careers, and written and oral scientific communication skills.

Prerequisite(s): Neuroscience 3000F/G with a minimum mark of 75%; one of Biology 2244A/B; Statistical Sciences 2244A/B; or Psychology 2811A/B and Psychology 2812A/B, or the former Psychology 2810; Pharmacology 3620; Physiology 3140A; one of Medical Sciences 3991F, Communication Sciences and Disorders 3317A/B, Psychology 3996F or Psychology 3997G, or the former Medical Sciences 3900F/G/Z, and registration in Year 4 of the Honours Specialization in Neuroscience

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Timetabled Sessions

Component	Date(s)	Time	Room
Lecture	Friday	1:30-4:30PM	XXXXXXXX

☒ Attendance at sessions is required

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

If students need assistance, they can seek support on the [OWL Brightspace Help](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

5. Learning Outcomes

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

- Articulate how to deal with key ethical research principles and issues that are relevant to neuroscience research.
- Engage in scholarly discussion on topics relevant to the Honors thesis project.
- Learn to design and conduct research using methodologies that actively incorporate principles of equity, diversity, and inclusion.
- Understand potential career pathways for neuroscience graduates.
- Implement time management strategies to effectively plan and prioritize research tasks.
- Develop the ability to identify implicit and explicit biases in research design, data collection, and interpretation, and propose strategies to mitigate them.
- Communicate orally accurately, clearly and logically, using the discourse of neuroscience.
- Articulate principles of good scientific writing style.
- Develop editing and feedback skills for written and oral scientific communications.

6. Course Content and Schedule

Fall Schedule

Week	Dates	Topic	Instructor
1	Sept 5	Course Introductions, Health and Safety and Research Ethics – In-Class	Grahn
2	Sept 12	Basics of Presentations – In-Class	Grahn
3	Sept 19	Basics of Thesis Writing – In-Class	Grahn
9	Nov 7	Reading Week	
10	Nov 14	Background Presentations – In-Class	Grahn
11	Nov 21	Background Presentations – In-Class	Grahn

Winter Schedule

Week	Dates	Topic	Instructor
1	Jan 9	EDI-D in Research – In-Class	Grahn
3	Jan 23	Thesis Writing: Round 2 – In-Class	Grahn
7	Feb 21	Reading Week	N/A
9	Mar 6	Basics of Posters – In Class	Grahn
12	Mar 27	Research Presentations – Poster Session	Grahn

Safety and Ethics Training

Students MUST successfully complete all appropriate safety and ethical training courses as outlined in the first lecture BEFORE commencing research. The courses must be completed, and certificates uploaded to OWL Drop Box. Failure to comply with university safety and ethics regulations will result in immediate suspension of the research project, notification of the appropriate governing bodies at Western and possible removal from the course.

7. Participation and Engagement

- ☒ Students are expected to participate and engage with content as much as possible (posting on the OWL forum, attending in-class lecture, asking questions at presentations, etc.)

8. Assessment and Evaluation

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

Assessment	Format	Weighting	Due Date	Flexibility
Ethics Submission	Owl	5%	Sep 19 th	72 hour no late penalty
Background Presentation	In-Class	35%	Nov 14 th , 21 st	Can trade with a classmate
Complete EDI-D module on OWL	Owl	5%	Jan 5 th	72 hour no late penalty

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Research Presentation	In-Class	40%	Mar 20 th	None
Attendance and Participation	In-Class	15%		One normal lecture may be missed without penalty.

Presentations: Each student will deliver a 12-minute **Background Presentation** talk describing their research project. The Background Presentation will focus on the introduction, hypothesis and rational of the project. This presentation will be marked by the course coordinator and teaching assistants. The **Research Presentation** is a poster that will describe the completed thesis work. The poster will be marked by the course coordinator and teaching assistants, and supervisors, labmates, and peers may attend. A primer outlining key considerations for developing and delivering a good scientific presentation will be provided as a lecture (Thesis presentation lecture). Poster principles will be address in a second lecture (Poster principles lecture). Students are strongly encouraged to seek feedback on their presentations and posters from their supervisor/laboratory members prior to delivering them in class.

Attendance and Participation: Students are required to attend the 1st lecture, provide training certificates in a timely fashion and participate in one assigned Background Presentation and the Research Presentation session (attend, listen and ask questions). One lecture (not Presentations) maybe be missed without 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 assessments have been designated as requiring supporting documentation:

- Background Presentation
- Research Presentation

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 course employs flexible deadlines for written assignments. For each assignment, students are expected to submit the assignment by the deadline listed. Should illness or extenuating circumstances arise, students are permitted to submit their assignment up to 72 hours past the deadline without a late penalty. Should students submit their assessment beyond 72 hours past the deadline, a late penalty of 20% 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 11:59 PM EST unless otherwise specified
- ☒ Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could be subject to late penalties (see below) or a 0
- ☒ Written assignments will be submitted to Turnitin (statement in policies below)
- ☒ Students will have unlimited submissions to Turnitin
- ☒ Rubrics will be used to evaluate assessments and will be posted with the instructions

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- ✓ 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
- ✓ Prior to the filing of a written request for relief, students must attempt to resolve the concern regarding a mark or grade through informal consultation with the instructor. If the student is dissatisfied with the decision of the instructor or does not receive a decision from the instructor, a written request for relief must be submitted to the Department Chair within three (3) weeks from the date that the mark was issued.

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 20 %/day
- ✓ An assessment cannot be submitted after it has been returned to the class
- ✓ If a make-up assessment is missed with documentation, the student will receive an INC and complete the task the next time the course is offered
- ✓ For assignments with accommodation, the accommodation must cover the initial due date and the full 72-hour 'no-late-penalty' period. (Late assessments with accommodation should be submitted 24 hours after the end of the accommodation period)

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, **which could impact program progression**. Outstanding SPCs will reduce the course load for the term the exam is deferred as outlined in [Definitions of Types of Examinations](#) policy.

9. Communication

- ✓ Students should check the OWL Brightspace site every 24–48 hours
- ✓ Students should email their instructor(s) and teaching assistant(s) using email.
- ✓ Emails will be monitored daily; students will receive a response in 24–48 hours
- ✓ This course will use discussions on Brightspace.
- ✓ Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

10. Office Hours

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- ☒ Office hours will be held in person or over zoom
- ☒ Office hours will be held individually

11. Course Materials

- ☒ All resources will be posted on OWL Brightspace

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/upload (e.g., Must Knows Facebook group, Course Hero, Chegg, ChatGPT, etc.)
- ☒ Recordings are not permitted (audio or video) without explicit permission
- ☒ Permitted recordings are not to be distributed
- ☒ Students will be expected to take an academic integrity pledge before some assessments

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment. Relevant policies include Western's [Non-Discrimination/Harassment Policy \(M.A.P.P. 1.35\)](#) and [Non-Discrimination/Harassment Policy – Administrative Procedures \(M.A.P.P. 1.35\)](#). Any **student**, staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's [Human Rights Office](#). Harassment and discrimination can be human 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. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
2. Ensure you are in regular contact with your research supervisor.
3. Write regularly. Do not leave written assignments until the week they are due, but begin creating and editing them early on in the course.
4. Create a Gantt chart (google can help) with your thesis tasks, working backward from deadlines.
5. Practice your presentations with peers and your lab/supervisor before presenting in class.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor and or teaching assistants.
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

14. Western Academic Policies/Procedures and Statements

A. Absence from Course Commitments

[Medical, Compassionate, or Extenuating Circumstances](#)

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

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

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

Policy: [Academic Consideration – Undergraduate Students in First Entry Programs](#)

Procedures: [Student Medical Certificate](#)

Religious Holidays

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

Policy: [Accommodation for Religious Holidays](#)

Special Examinations

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

Policy: [Definitions of Types of Examinations](#)

B. Academic Appeals and Scholastic Offenses

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

Policy: [Requests for Relief from Academic Decisions](#)

Procedures: [Undergraduate Student Academic Requests for Relief](#)

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

Policy: [Scholastic Offences](#)

Procedures: [Undergraduate Scholastic Offences](#)

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

Policy: [Senate Review Board Academic Appeals](#)

Procedures: [Senate Review Board Academic Appeals](#)

C. Accessibility Statement

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

Policy: [Academic Accommodation for Students with Disabilities](#)

D. Correspondence Statement

The centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

E. Discovery Credit Statement

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

Policy: [Undergraduate Course Credit](#)

Procedures: [Discovery Credits](#)

F. Statement on the Use of Electronic Devices

[Insert a clear statement of what electronic devices will or will not be allowed during tests and examinations.]

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

Within this course, students are permitted to use AI tools exclusively for information gathering and preliminary research purposes. 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. Generative AI often produces prose that violates good standards for scientific writing (e.g., conciseness, consistency of terminology). 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.

H. Turnitin and other similarity review software

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and [Turnitin.com](https://www.turnitin.com).

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.

Policy: [Evaluation of Academic Performance](#)

15. BMSUE Academic Policies and Statements

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

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the School that any electronic devices, e.g., cell phones, tablets, cameras, smart glasses, smart watch or iPod are strictly prohibited. These devices MUST be left either at home or with the student's bag/jacket at the front of the room and MUST NOT be at the test/exam desk or in the individual's pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam **and this will be documented as a Scholastic Offence**. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

B. Copyright and Audio/Video Recording Statement

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

C. Rounding of Marks Statement

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

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

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

Policy: [Marks/Grades; Definitions of Grades; Grading Scale for Undergraduate Students](#)

16. Support Services

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

Statement on Gender-Based and Sexual Violence

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at the following website:

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

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

Other important links:

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

Appendix 1: Western University Academic Policies and Procedures

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

