

Neuroscience 3000G
Current Topics in Neuroscience

Course Syllabus for Winter 2026



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

1. Technical Requirements:



Stable internet connection



Laptop or computer

2. Important Dates:



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

March 30, 2026: Last day to withdraw from second-term half course without academic penalty

3. Contact Information

Course Coordinator	Contact Information
Sean Cregan	scregan@uwo.ca

Instructor(s) or Teaching Assistant(s)	Contact Information
Tim Bussey (Instructor)	tbussey@uwo.ca
Lisa Saksida (Instructor)	lsaksida@uwo.ca
Marco Prado (Instructor)	mprado@uwo.ca
Rob Bartha (Instructor)	rbartha@uwo.ca
Emma Tassinari (Teaching Assistant)	etassina@uwo.ca
Xin Zhao (Teaching Assistant)	xzhao529@uwo.ca

4. Course Description and Design

Delivery Mode: in person

Students will read and critique current neuroscience research from the experimental and clinical literature. Topics will range from cellular properties of neurons to cognitive neuroscience to advanced imaging modalities. Critical thinking, evaluation of data, research design, and the conduct of scientific inquiry will be emphasized along with the ethical implications of research in neuroscience.

Prerequisites: Neuroscience 2000 with a minimum mark of 75% and registration in Year 3 of an Honors 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
Lectures	Jan 7, 14; Feb 11, Mar 18	12:30 – 3:30pm
Paper Discussion Session	Jan 21, 28; Feb 4, 25; Mar 4, 11, 25, Apr 1, 8	12:30 – 3:30pm

- ☒ Asynchronous pre-work must be completed prior to sessions
- ☒ Attendance at sessions is required
- ☒ Missed work should be completed within 24 hours

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:

- To develop understanding of the structure and style of neuroscience articles so that you are able to identify their key elements.
- To develop skills in critically evaluating neuroscientific investigations
- To develop skills in leading a discussion that will elicit a broad range of perspectives on a topic
- To gain familiarity with a number of methods and questions in neuroscience

6. Course Content and Schedule

Week	Dates	Topic	Instructor
1	Jan 7	Introduction	Cregan
2	Jan 14	Topics in Memory Research	Bussey/Saksida
3	Jan 21	Paper Discussion Session I	Bussey/Saksida
4	Jan 28	Paper Discussion Session II	Bussey/Saksida
5	Feb 4	Paper Discussion Session III	Bussey/Saksida
6	Feb 11	Topics in Neurodegeneration	Prado
7	Feb 16-22	Reading Week	
8	Feb 25	Paper Discussion Session IV	Prado
9	Mar 4	Paper Discussion Session V	Prado
10	Mar 11	Paper Discussion Session VI	Prado
11	Mar 18	Topics in MRI & Spectroscopy	Bartha
12	Mar 25	Paper Discussion Session VII	Bartha
13	Apr 1	Paper Discussion Session VIII	Bartha
14	Apr 8	Paper Discussion Session IX	Bartha

7. Participation and Engagement

- ☒ Students are expected to participate and engage with content as much as possible
- ☒ Students can also participate during sessions by interacting during the session with their peers and instructors, using course Slack platform.

8. Assessment and Evaluation

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

Assessment	Format	Weighting	Due Date	Flexibility
Leading Class Discussions	Power Point	20% (10% each)	12:30pm on assigned date	Students choose 2 dates
Thought Papers	Written	30% (10% each)	12:30pm on assigned date	Students choose 3 dates
Essay	Written	30%	April 9th	10% reduction each day late
Participation		20%		

Designated Assessment: The following assessment has been designated as requiring supporting documentation:

- Essay – due April 9 (2026) 11:59pm EST. Late submissions will be deducted 10% per day.

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
- ☒ Students can select 2 dates (out of 9) for *Leading Class Discussions*. Therefore, instructor reserves the right to deny academic considerations given the deadline flexibility.

- ☒ Students select 3 dates out of 9 for *Thought Paper* submissions. Therefore, instructor reserves the right to deny academic considerations given the deadline flexibility.

General information about assessments

- ☒ Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could be subject to late penalties (see below) or a 0
- ☒ Written assignments will be submitted to Turnitin (statement in policies below)
- ☒ Students will have unlimited submissions to Turnitin
- ☒ Rubrics will be used to evaluate assessments and will be posted with the instructions
- ☒ A student might not receive the same grade as their group members if it is determined that the distribution of work was not equal
- ☒ After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days
- ☒ Any grade appeals on assignments must be received within 3 weeks of the grade being posted.

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:

- ☒ Students missing an assigned Leading Class Discussion session without academic accommodation (and supporting documentation) will be given a zero for that assessment. Students with academic accommodation and supporting documentation may be reassigned to another session if possible and if not, the assessment will be reweighted to another component as decided by the instructor.
- ☒ Thought Papers are due by 12:30pm on the due date. Late submissions will not be accepted and considered missed. Missed Thought Paper assignments without academic accommodation (and supporting documentation) will be given a zero. Missed Thought Paper assignments with academic accommodation may be reassigned to a different session if possible, and if not, the assessment will be reweighted to another component as decided by the instructor.
- ☒ Essay is due by 11:59pm EST on April 9th (2026). Late assessments without academic accommodation will be deducted 10% for each day late. Late assessments with accommodation will be due within 24 hours of 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. 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 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 and Slack.
- ☒ Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

10. Office Hours

- ☒ Office hours will be held in-person (or remotely using zoom if necessary)
- ☒ Office hours will be booked through email correspondence
- ☒ Office hours will be individual or group as determined during correspondence

11. Resources

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

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment. Relevant policies include Western's [Non-Discrimination/Harassment Policy](#) (M.A.P.P. 1.35) and [Non-Discrimination/Harassment Policy – Administrative Procedures](#) (M.A.P.P. 1.35). Any **student**, staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's [Human Rights Office](#). Harassment and discrimination can be human 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 your time throughout the course.

2. Make it a daily habit to log onto OWL Brightspace to ensure you have seen everything posted to help you succeed in this class.
3. Follow checklists created on OWL Brightspace or create your own to help you stay on track.
4. Take notes as you go through the lesson material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.
5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

14. Western Academic Policies and Statements

A. Absence from Course Commitments

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 [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](#)

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 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 (Presentations) 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

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, as described above, differ from cumulative and term averages. Cumulative and term averages 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

The policies and procedures listed in this syllabus are outlined in the table below. In some cases, a policy does not include an accompanied procedures document.

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