

Interdisciplinary Medical Sciences

MEDSCIEN 4931G: Special Topics in Medical Sciences

Course Outline for Winter 2025



Western University is committed to a **thriving campus**; therefore, your health and wellness matter to us! The following link provides information about the resources available on and off campus to support students:

<https://www.uwo.ca/health/>

Your course coordinator can also **guide you** to resources and/or services should you need them.

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Technical Requirements



Stable internet connection



Laptop



Working microphone



Working webcam (*optional*)

***Select activities or assignments may require the use of a working microphone and/or webcam*

Important dates



Term	Classes Start	Reading Week	Classes End	Exams
Winter	January 6	February 15 – 23	April 4	April 7 - 30

***March 31, 2025 is the last day to drop a second term half-course without academic penalty.*

Course coordinator and instructor



Coordinator & primary instructor: Dr. Katelyn Wood, she/her (knorton9@uwo.ca)

Dr. Wood completed her BSc, MSc, and PhD studies at Western University in Kinesiology. Her teaching background spans from human anatomy and embryology to research methods. Dr. Wood has a learner-centered approach to teaching, providing students with the tools to enhance their learning and develop their critical thinking.

Course description



An introduction to the basic medical sciences through a discussion and investigation of selected topics in medical sciences. Topics will focus on human diseases or conditions which are most common or result in most illness and death or burden to the health system (e.g., diabetes, obesity, cancer, neurodegenerative disease).

Anti-requisites: MEDSCIEN 4930F/G

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.

Course resources



All course material will be posted to OWL Brightspace. 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.

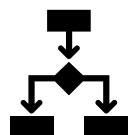
Learning outcomes

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



- Draw from multiple basic medical science disciplines (e.g. pathology, epidemiology, biochemistry, anatomy, physiology, pharmacology, immunology) to use an interdisciplinary approach to understand and evaluate a chosen disease
- Critique primary scientific literature by summarizing the main findings and identifying the strengths, weaknesses, and limitations within a research study
- Conduct an effective search inquiry using an appropriate medical literature database and formulate effective arguments in a relevant field
- Develop written and oral skills to communicate information, arguments, and analyses accurately and reliably, to a range of audiences
- Identify relevant goals to showcase personal development and growth by engaging in ongoing critical reflection

Weekly rhythm and content



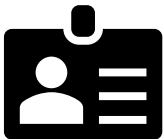
Mode	Date & time	Time commitment
Asynchronous content	Friday, by noon	~1 hour independent
In-person lecture	Tuesday 130-330pm	110 minutes synchronous

Attendance, Participation, and Engagement:

- **Lectures:** Attendance is **recommended but not required**. All sessions will be recorded and the recordings made available through OWL. Closed captioning using an autogenerated transcript will be provided on audio and video recordings.
- **Asynchronous:** Students are expected to participate and engage with content as much as possible.
- **Participation:** Students are expected to participate by reflecting on course content and/or their learning behaviors at the end of selected weeks (10%) via OWL. Students are encouraged to submit their reflection in any format they wish (e.g. written, video, mind map etc.)

Contact information

Faculty members	
Name	Contact
Dr. Katelyn Wood	knorton9@uwo.ca



Teaching assistants	
Name	Contact
Fatema Abdullatif	fabdull7@uwo.ca
Alfredo Varela Vega	avarelav@uwo.ca
Neel Ravi Vajaria	nvajaria@uwo.ca
Sylvia Lin Cheng	sche243@uwo.ca

Course Communication

Several platforms will be used to communicate throughout this course and are summarized below.



- When contacting TAs, **Dr. Wood** should always be included in the communication (cc'd via email or added to MS Teams chat).
- All inquiries regarding written assignment grades and feedback will be taken care of through a Grade Inquiry Request form – please do not contact TAs or instructors via email/Teams for this reason. If you do so, you will simply be redirected to complete the form (provided under Course Resources on Brightspace).
 - **There is a limit of THREE grade inquiries per individual/term.**

Platform	Purpose
OWL (Brightspace) <i>Check every 24-48 hours</i>	<ul style="list-style-type: none">• Course resources (e.g., lecture recordings, slides, required readings).• Assignment instructions, submission, and feedback.• Course updates and announcements• Addressing questions related to course content (students are encouraged to attempt to answer their peers' questions).
E-mail <i>E-mails from non-UWO accounts will not be acknowledged.</i>	<ul style="list-style-type: none">• Direct contact with course coordinator for administrative, personal/confidential, or grading purposes.

Course Schedule

The next page contains a broad look at the weekly schedule for the term. Any deviations will be communicated.

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Week	Dates		Topic(s)	Lecturer	Tasks and assessments
	Tuesday Lecture (S)	Online Content Posted (A)			
1	January 7	January 10	Synchronous: Introduction, CER Asynchronous: Interdisciplinarity (pre-read)	Dr. Wood	Critical Appraisal 1 (group or individual)
2	January 14	January 17	S: Interdisciplinarity* A: CV fitness, cortical plasticity, and aging (pre-read)	Dr. Wood	Case Study 1
3	January 21	January 24	S: Brain Aging – Structure and Function A: Revitalizing the Aging Brain and Neurogenesis (podcast)	Dr. Wood Dr. Rusty Gage	Reflection 1
4	January 28	January 31	S: Academic Integrity* and Publication Process A: Library Resource (pre-read)	Dr. Wood	Critical Appraisal 2 Case Study 2
5	February 4	February 7	S: Literature Review; Systematic Review A: Research Impact Canada (online module)	Yvana Sawaya	Reflection 2
6	February 11	February 14	S: Communicating Science*, Infographic Workshop A: None	James Shelley	Case Study 3
7	Feb 15 to Feb 23 – Spring Reading Week				
8	February 25	February 28	S: EDI In Human Research A: Real to surreal – a new aging experience with virtual reality (podcast)	Dr. Ghosh-Swaby Dr. Paul Frewen	Reflection 3
9	March 4	March 7	S: VR and Neurofeedback Demonstrations A: Balancing the Aging Body and Mind (podcast)	Dr. Paul Frewen Dr. Montero-Odasso	Literature Review
10	March 11	March 14	S: Chemical Communication with Age A: The SuperAgers (podcast)	Dr. Jane Rylett Dr. Angela Roberts	NA
11	March 18	March 21	S: Epidemiology and Methodology of Aging A: Cannabis Use and Its Impact on the Aging Population (podcast)	Dr. Mark Speechley Dr. Jibran Khokhar	Reflection 4
12	March 25	March 28	S: Course Review; Q&A; Work Period A: None	Dr. Wood	Reflection 5
13	April 1	April 4	S: Infographic Presentations A: Infographic Presentations: Peer Feedback	Dr. Wood	Infographic Presentation
April 7 to April 30 – Fall Exam Period					

Evaluation and Deadlines

Below is the evaluation breakdown for the course. On OWL, you will find a specific document outlining the description, expectations, and rubric for each assessment. Any deviations will be communicated.

Assessment		Format	Weight	Due Date	Flexibility
Critical Appraisals	CA1: Group or Individual	Written	5%	January 20	48h no-late penalty
	CA2: Individual	Written	10%	February 3	48h no-late penalty
Case Studies	CS1: Interdisciplinarity	Written	15%	Noon, Jan 14	Drop lowest; best 2/3
	CS2: Academic Integrity			Noon, Jan 28	
	CS3: Science Communication			Noon, Feb 11	
Literature Review		Written	20%	March 3	48h no-late penalty
Infographic Presentation		Visual	15%	March 31/Apr 1	Not applicable
Reflections	R1: Aging Brain	Written	10%	January 24	48h no-late penalty
	R2: Science Literature			February 7	
	R3: EDI			February 28	
	R4: Evolving Perspective			March 21	
	R5: Course Reflection			March 28	
Final Exam (take home)		Written	25%	TBD	Not applicable

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, no assessment has been designated as requiring supporting documentation.

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.
- For the case study assignments, the best 2 out of 3 will count; therefore, no accommodations will be provided for missed submissions.
- This course employs flexible deadlines for assignments. The assignment deadlines can be found above in the course evaluation. 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.
 - Should students submit their assignment **beyond 48 hours past the deadline**, a late penalty of 10% 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 through the **Student Portal**: https://registrar.uwo.ca/academics/academic_considerations/index.html
 - The instructor reserves the right to deny such academic considerations, given the deadline flexibility provided.

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- If you have a long-term academic consideration or an accommodation for a 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. **Case studies must be uploaded by NOON (12pm) the day of the lecture that the case will be discussed.** No grace periods or accommodations based on the structure of this task.
- ✓ 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 assignments, where needed, 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.
 - **There is a limit of THREE grade inquiries per student.** Also, note that regrade requests must meet Western's criteria for appeal:
<https://www.uwo.ca/sci/advising/procedures/appeals/index.html>
- ✓ 15% of your course grade will be evaluated and returned 3 days prior to the drop deadline (statement in policies below).

Literature Review Scavenger Hunt: Students will conduct a comprehensive literature search using medical databases and gather specific types of information related to a chosen topic. Students will select a topic from a list of suggestions, or students can request to study an alternative topic with the Course Coordinator's approval. These topics include diseases/disorders with a strong interdisciplinary basis. More details to follow on OWL.

Infographic Presentation: Students will create an infographic based on their findings from their literature review scavenger hunt. Students will prepare a short (5min) presentation to be presented in class on April 1, OR recorded and submitted online on March 31. These presentations will be evaluated by the Teaching Assistants as well as 5 of your peers. Further details on the assignment will be provided separately. You must submit your presentation on time, failure to do so may not allow for peer evaluation. The final presentation grade will be a combination of TA grade (50%), peer grade (40%), and the completion of peer grading (10%). More details to follow on OWL.

Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. This table 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 missed or late assessments

- Late assessments without academic consideration will be subject to a late penalty 10% of the entire assignment's worth per day (**not** 10% of the grade received).
- An assessment cannot be submitted after it has been returned to the class; an alternate assessment will be assigned.
- A make-up exam will be arranged for the April exam for students approved by the Academic Advising Office. The exact date for this exam will be announced at a later date but will not be less than 72 hours after the original date.
- To pass the course, students must:
 - Receive an average of at least 50% on the exam component of the course.

If any of these criteria is not achieved, the student will receive an INC and alternate arrangements will be made by the course coordinator.

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](#).



Mentorship hours

What are mentorship hours?

Students may seek additional support by requesting an appointment for Mentorship Hours with Dr. Wood. During these appointments, students are welcome to discuss course content or any topic they would like in the **academic, personal, or professional** realms.

In terms of academics, Dr. Wood will ensure any important points related to course content or assessments that are covered during mentorship hours are shared with the rest of the class.



When are mentorship hours?

Weekly mentorship hours will take place in-person or virtually by appointment.

How do you schedule an appointment?

To request mentorship hours, please send Dr. Wood an email or a direct message on Teams.

Appointments will typically be ~20 minutes to accommodate as many students as possible (approximately 3 per hour).

How to be successful in this course

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

- Invest in a planner or planning application to keep track of your courses. Populate your deadlines at the start of the term and schedule time at the start of each week to get organized and manage time.
- Make it a daily habit to log onto OWL and Teams to ensure you have seen everything posted to help you succeed in this class.
- Follow weekly checklists created on OWL or create your own to help you stay on track.
- Take notes as you go through the lesson material. Keeping notes written on a Word document or similar (or, in particular, handwritten notes!) will help you learn more effectively.
- Connect with others. In addition to your weekly class activities, try forming an online or in person study group for study and peer support.
- Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion board to solicit feedback from your peers, GTAs, and instructors. For specific or personal academic questions, don't hesitate to

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email your instructor directly at their UWO/Schulich email addresses or book an office hours appointment.

- Celebrate your successes! It can seem easier to motivate ourselves when we take the time to acknowledge the work we've done, the efforts we've made, and the new knowledge and experiences we've gained.

Professionalism & Privacy

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

- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared (e.g., Must Knows Facebook group, Course Hero, Chegg, etc..)
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment. Relevant policies include Western's [Non-Discrimination/Harassment Policy](#) (M.A.P.P. 1.35) and [Non-Discrimination/Harassment Policy – Administrative Procedures](#) (M.A.P.P. 1.35). Any **student**, staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's [Human Rights Office](#). Harassment and discrimination can be human rights-based, which is also known as EDI-based, (sexism, racism, transphobia, homophobia, islamophobia, xenophobia, antisemitism, and ableism) or non-human rights-based (personal harassment or workplace harassment).

Western Academic Policies and Statements

Absence from Course Commitments

Absence from Course Commitments

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

- Students will now submit all requests through the Student Absence Portal which they access on the [Academic Considerations webpage](#).

Students missing course work for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic

consideration request per course per term without supporting documentation. Note that supporting documentation is always required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

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

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

Accommodation for Religious Holidays

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

Special Examinations

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

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

Academic Offenses

Scholastic offences are taken seriously, and students are directed [here](#) to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review [The policy on Accommodation for Students with Disabilities](#)

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](#)

Discovery Credit Statement

Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program. The details of this policy and the deadlines can be found [here](#).

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:

- Full course (1000 to 1999): at least 3000 words
- Half course (1000 to 1999): at least 1500 words
- Full course (2000 and above): at least 5000 words

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- 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.

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).

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, tablet 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. No 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

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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 ChatGPT and other Artificial Intelligence (AI) Platforms

The University does not currently have a policy on the use of AI text generators, such as ChatGPT, by our students in coursework. A course-specific genAI policy will be made available by the instructor on the course’s OWL website.

Support Services at Western University

- 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.