

KIN4480B - Exercise Neuroscience
 Winter 2025

Instructor: Dr Leena Shoemaker, PhD Email: lshoemak@uwo.ca Office Hrs: Immediately after Wednesday class AND by appointment TAs: TBD	Lectures : M, W, F 8:30 am -9:20 am Winter 2023 Instruction Mode : In-person
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NOTE: All course information including grades, assignment outlines, deadlines, etc. are available via OWL. Check the website regularly for course announcements.

<p>Calendar Course Description (including prerequisites/anti-requisites): This course will examine the relationship between exercise and cognitive neuroscience. Students will be provided with an overview of fundamental methodologies used in cognitive neuroscience research before examining the literature on exercise neuroscience, with a focus on different study designs and application to various age groups and clinical populations.</p> <p>Prerequisite(s): None.</p> <p>Extra Information: 3 lecture hours per week (in-person and online).</p>
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You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.

Statement on Prerequisite Checking

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

NOTE: If you wish to enrol in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.

My Course Description

Welcome! This course is intended to provide you with an overview of the field of exercise neuroscience. We will begin with an overview of the fundamental methodologies used in neuroscience (e.g., EEG, MRI) before examining the literature – from classic studies to the newest cutting-edge findings – in this exciting field. In this course, you will have the opportunity to refine your critical thinking, interpretation, and academic writing skills. Throughout the course you are expected to participate in meaningful, engaging discussions.

Personal Teaching Approach

Research shows that students who participate have a deeper understanding of course content and are more likely to obtain a better grade in the course. Therefore, I aim to facilitate your learning through multiple avenues of participation. For example, Friday “lectures” will host small-group discussions (lead by a TA). I will also provide multiple opportunities for “inquisitive interactions” with your peers, which ultimately builds a deeper understanding of the course content. Please talk to me if you have any concerns (e.g., social anxiety, disabilities etc) about the inclusivity and/or accessibility of these activities. I want to ensure that all students have equal opportunities to succeed in this classroom environment and will make changes accordingly.

Lastly, my job is to educate you, which partly involves assisting you to learn academ4.4 (ou)11.6 ((L.3 (as)1nc)1 (l)(t

Week	Topics	Schedule & Deadlines
Week 1: Jan. 6-10	Introduction <i>What is "exercise neuroscience"?</i>	No lecture Friday Jan 10 th Sign-up for Discussion groups.
Week 2: Jan. 13-17	Cognition & the brain Neuroimaging basics	Form groups of 4-5 and sign-up for presentation on OWL (by Friday 17 th) Quiz #1 Friday
Week 3: Jan. 20-24	Acute exercise	Quiz #2 Friday
Week 4: Jan 27 – 31	Cross-sectional and longitudinal studies	Groups 1 & 2 Presentation Wednesday Quiz #3 Friday
Week 5: Feb. 3-7	Exercise interventions	Assignment 1 due Monday 3rd Groups 3 & 4 Presentations Wednesday Quiz #4 Friday
Week 6: Feb. 10-14	Exercise interventions	Groups 5 & 6 Presentations Wednesday Quiz #5 Thursday Feb 13th
Week 7: Feb. 17-21	NO CLASS – READING WEEK	
Week 8: Feb 24 – 28	Clinical populations	Groups 7 & 8 Presentations Wednesday Quiz #6 Friday
Week 9: Mar. 3-7	Clinical populations	Groups 9 & 10 Presentations Wednesday Quiz #7 Friday
Week 10: Mar. 10-14	Physical activity in childhood & adolescence	Assignment 2 due Monday 10th Group 7 10p(s)6 (ento)2 tions s dn3 (&)7 (n)6 (e)13 (y)8

Schedule (subject to change)

Course Evaluation:

1. Quizzes	28%
2. Assignment #1	10%
3. Assignment #2	12%
4. Assignment #3 - Grant Proposal	25%
5. Group presentation	15%
6. Participation in group discussions	10%

3. Registrar's Office -- <http://www.registrar.uwo.ca/>
4. Ombuds Office -- <http://www.uwo.ca/ombuds/>

In accordance with [policy](#), 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.

Health and Wellness

As part of a successful undergraduate experience at Western, we encourage you to make your health and wellness a priority. Western provides several on-campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your degree. For example, to support physical activity, all students receive membership in Western's Campus Recreation Centre as part of their registration fees. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page (<http://www.music.uwo.ca/>), or the McIntosh Gallery (<http://mcintoshgallery.ca/>). Further information regarding health and wellness-related services available to students may be found at <https://www.uwo.ca/health/>.

If you are in emotional or mental distress, please visit Western Psychological Services (<https://www.uwo.ca/health/psych>) for a list of options for obtaining help.

Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, in the [Academic Calendar](http://westerncalendar.uwo.ca) (westerncalendar.uwo.ca).

Plagiarism

Student work is expected to be original. Plagiarism is a serious academic offence and could lead to a zero on the assignment in question, a zero in this course, or your expulsion from the university. You are plagiarizing if you insert a phrase, sentence or paragraph taken directly from another author without acknowledging that the work belongs to him/her. Similarly, you are plagiarizing if you paraphrase or summarize another author's ideas without acknowledging that the ideas belong to someone else. All 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 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 (www.turnitin.com).

Re-submission of Previously Graded Material

Without the explicit written permission of the instructor, you may not submit any academic work for which credit has been obtained previously, or for which credit is being sought, in another course or program of study in the University or elsewhere.

Use of Artificial Intelligence for the Completion of Course Work

Within this course, you may only use artificial intelligence tools (e.g., "ChatGPT") in ways that are specifically authorized by the course instructor. All submitted work must reflect your own thoughts and independent written work.

Use of Statistical Pattern Recognition on Multiple Choice Exams

Computer-marked multiple-choice tests (T6.7 (udy0 Tw 33.7)-6 (atw 33.793 0 Td4.90)2.6 (t)-6.7.6 (i))

that may indicate cheating.

Use of Electronic Devices

During Exams: Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices during ANY tests, quizzes, midterms, examinations, or other in-class evaluations.

During Lectures and Tutorials: Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

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extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty. Academic considerations shall be granted only where the documentation indicates that the onset, duration and severity of the

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for relief must be supported by a clear and detailed explanation of the reasons for the request together with all supporting documentation.

Appeals generally proceed in this order:

1. Course instructor (informal consultation)
2. Department Chair (submission of written request)
3. The Dean of the Faculty (submission of written request)

In the case of perceived procedural unfairness, steps 2 and 3 are carried out within the Department and Faculty offering the course. In the case of extenuating medical or compassionate circumstances that impact on a grade, steps 2 and 3 are carried out within a student's Home Department and Faculty.

