

Psychology 3227B 550 (Winter 2023) Neuropsychology: Brain Injury Diagnosis, Treatment and Recovery

1. COURSE INFORMATION

Instructor: Dr. Jennifer Hoshooley

Office: Virtual – or by appointment on campus

Office Hours: Wednesdays 10:00am – 11:00am (Zoom link will be provided on

OWL) and by appointment

Time and Location of Lectures: Mondays 6:30 – 9:30pm; Classroom HC-W17

E-mail address: jmckay6@uwo.ca

Antirequisite(s): Psychology 3224A/B.

Prerequisite(s): Psychology 2220A/B or 2221A/B and registration in third or fourth year of the Honors Specialization or Major in Psychology modules, or permission of

the department.

3 lecture hours, 0.5 course.

2. COURSE DESCRIPTION

This course will discuss: 1) Common forms of brain injury, 2) basic neuroanatomy, 3) various methods of diagnosing brain injuries, including neurocognitive assessments and neuroimaging techniques, 4) historical and current treatments of the more common forms of brain injury, and 5) treatment outcomes.

3. COURSE LEARNING OBJECTIVES

By the end of the course students should:

- Be familiar with some of the symptoms that follow acquired brain damage in human beings and assessment of these symptoms
- Understand what these symptoms can tell us about the normal functional organization of the human brain
- Appreciate the neuroplastic capacities of the developing and adult brain
- Have further developed critical thinking and communication skills

4. DESCRIPTION OF CLASS METHODS

Our class will be a combination of both traditional lecture format and hands-on engaged learning. In both formats, class participation and discussion are strongly encouraged and valued. I will do my best to create a classroom environment where all students can feel empowered to contribute and respectfully consider the various viewpoints of others in our class.

5. TEXTBOOKS

Kolb, B., & Whishaw, I. Q. (2021). Fundamentals of Human Neuropsychology. (Eighth Edition). New York: Worth Publishers. ~Recommended.

Cahalan, S. (2012). *Brain on fire: My month of madness.* New York: Free Press. ~Required

6. METHODS OF EVALUATION

Upon entry into the course students should already be familiar with central nervous system structure/organization and electrical/chemical communication in the brain, however the major points relating to these topics will be reviewed in lectures and readings.

There will be a test on February 27th worth 30% of your final grade. The test will be 2 hours long and occur in class. The final exam, worth 35% of the final grade, will occur in the exam period as scheduled by the registrar. The final exam will be 2 hours in length. The final exam will not be cumulative. The test and exam will cover material from lecture and assigned readings (papers, and our case study book, *Brain on Fire: My Month of Madness*). The format of the test and the final exam will be multiple choice and short answer.

In addition to the test and final exam, students will be graded on a case study report (this reflection/exploration paper is worth 35% of your final course grade) examining our case study book, *Brain on Fire: My Month of Madness (Parts 1 & 2)*. The details of this writing assignment and a marking rubric will be provided early in the course.

If you need to seek academic accommodation for the case study report, and you receive approval, an extension of 48 hours will be granted unless otherwise advised by your Academic Advisor. If you need to seek accommodation for Test 1 or the Final Exam and you are approved, you can choose to have either the weight of the missed element evenly distributed over the remaining two course elements, or you can complete an alternative assessment for the material under consideration.

Test	Date	% of Final Mark
Test #1	Mon Feb 27	30%
Case Study Report	Mon Mar 20	35%
Final Exam	TBA	35%

6.1 Statement Regarding Academic Accommodation in Psychology at Huron University College

In the Department of Psychology at Huron, courses are structured to allow students as much flexibility as possible. In the event of an acute medical illness or other personal emergency, students must request academic consideration as per Western Academic Senate Policy. The instructor must indicate on the course outline how accommodations are granted and arranged.

Student requests for academic consideration/accommodation for missed work must be submitted in a timely manner, typically no more than 48 hours after the missed evaluation. Requests submitted more than 48 hours after the missed evaluation will normally require a formal recommendation from an Academic Advisor.

For missed coursework worth less than 10% of the overall grade in a course, students should contact the instructor in writing as soon as possible to arrange for accommodation. In cases where accommodation is granted, the instructor will inform the student in writing what accommodation will be granted (e.g. makeup test, reweighting missed evaluation, accept late assignment).

For missed coursework worth 10% or more of the overall grade in a course, students must contact their home faculty Academic Advising office with appropriate documentation (at Huron, this is Huron's Academic Advising Office; if you are a student at a different campus, contact your academic advisor at your home campus).

In the Department of Psychology, if accommodation is granted, students will typically be granted an extension of 48 hours for written essays and reports from the time when accommodation is granted in writing, unless otherwise discussed with the course instructor. The typical accommodation for missed tests will be reweighting of the course grade, unless otherwise discussed with the course instructor. Instructors may request further documentation to approve accommodations.

Students should refer to the following for more information regarding academic consideration and accommodation:

Western Senate Policy regarding Accommodation for Medical Illness https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

Huron Academic Advising https://huronatwestern.ca/student-life/student-services/academic-advising/faq/

7. Statement Regarding Grades in Psychology at Huron University College

Students at Huron University College should consider a grade in the range from 75-79 to be evidence of satisfactory performance in a 3000-level Psychology course. Grades in the A (80-90%) range will only be awarded for performance that is demonstrably superior to the third or fourth-year standard associated with the Major or Minor modules. A grade of A+ (90-100%) will only be awarded rarely and only for work that is exceptional.

8. LECTURE SCHEDULE

Below is a listing of the tentative topics to be covered in class each week. Although we will aim to follow the schedule as closely as possible, it is important to attend class and to consult our OWL website frequently to be made aware of any updates or slight modifications to the schedule.

Mon Jan 9: Course organization and evaluation scheme

Neuropsychology history

Mon Jan 16: Neuroanatomy Review

Mon Jan 23: Brain Imaging & Principles of Neocortical

Function

Mon Jan 30: Disconnection Syndromes

Mon Feb 6: Neuropsychological Assessment

Mon Feb 20: No Class – Reading Week

Mon Feb 27 Test #1 (Content from Sept 12 – Oct 17)

Case Study Book (Chapters 1 – 14) 2 hrs in

class - no lecture to follow

Mon Mar 6: Learning, Memory, and Spatial Behaviour

Mon Mar 13: Language

Mon Mar 20: Emotion - Case Study Report -Due at 6:30pm

Mon Mar 27: Paediatric and Adult Plasticity

Mon Apr 3: Review Part 3 of Brain on Fire Memoir +

- Kolb, B., & Muhammad, A. (2014). Harnessing the power of neuroplasticity for intervention. Frontiers in Human Neuroscience, 8, 377 385.
- McDonald, M. W., Hayward, K. S., Rosbergen, I. C. M., Jeffers, M. S., & Corbett, D. (2018). Is Environmental Enrichment Ready for Clinical Application in Human Post-stroke Rehabilitation? *Frontiers in Behavioral Neuroscience*, 12, 135–135. https://doi.org/10.3389/fnbeh.2018.00135



Appendix to Course Outlines: Academic Policies & Regulations Fall/Winter 2022-2023

Huron will continue to follow the guidance of public health and government officials. It is anticipated that there will be no disruptions to in-person instruction. This is subject to change.

Student Code of Conduct

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at:

 $\frac{https://huronatwestern.ca/sites/default/files/Res\%20Life/Student\%20Code\%20of\%20Conduct\%20-620Revised\%20September\%202019.pdf.$

Prerequisite and Antirequisite Information

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. 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.

Attendance Regulations for Examinations

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: <u>Academic Calendar</u> - Western University (uwo.ca)

Statement on 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, at the following website: Academic Calendar - Western University (uwo.ca). The appeals process is also outlined in this policy as well as more generally at the following website:

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

Turnitin.com

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 The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

Statement on Use of Electronic Devices

It is not appropriate to use electronic devices (such as, but not limited to, laptops, tablets, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

Statement on Use of Personal Response Systems ("Clickers")

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else's clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

Academic Consideration for Missed Work

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: http://academicsupport.uwo.ca/.

Policy on Academic Consideration for a Medical/Non-Medical Absence

(a) Consideration on <u>Medical Grounds</u> for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the <u>Student Medical Certificate</u>. The instructor may <u>not</u> collect medical documentation. The

advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

b) Medical Grounds for assignments worth 10% or more of final grade: Go Directly to Academic Advising

University Senate policy, which can be found at <u>Academic Calendar - Western University (uwo.ca)</u> requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the "home faculty" is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Dean. The instructor's decision is appealable to the Dean.

c) Consideration on <u>Non-Medical</u> Grounds: Consult Huron Support Services/Academic Advising, or email <u>huronsss@uwo.ca</u>.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation. All consideration requests must include a completed <u>Consideration Request Form</u>. Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: accommodation_medical.pdf (uwo.ca). Consult Huron Academic Advising at huronsss@uwo.ca for any further questions or information.

Support Services

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron's Student Support Services at https://huronatwestern.ca/student-life/student-services/.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: https://huronatwestern.ca/contact/faculty-staff-directory/.

If you think that you are too far behind to catch up or that your workload is not manageable, you

should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, https://huronatwestern.ca/student-life/student-services/academic-advising/ or review the list of official Sessional Dates on the Academic Calendar, available here: http://www.westerncalendar.uwo.ca/SessionalDates.cfm.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: https://huronatwestern.ca/student-life/student-

<u>services/</u> Office of the Registrar: https://registrar.uwo.ca/

Student Quick Reference Guide: https://huronatwestern.ca/student-life/student-services/#1 Academic Support & Engagement: https://huronatwestern.ca/student-university College Student Council: <a href="https://huronatwestern.ca/student-uni

<u>life/beyond-</u> <u>classroom/hucsc/</u>

Western USC: http://westernusc.ca/your-services/#studentservices

Wellness and Health Supports at Huron and Western

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. All Huron staff and faculty have received training on responding to disclosures of Gender-Based Sexual Violence (GBSV); students should know that the Community Safety Office is a resource for survivors, providing support and, if desired, guidance while referring them to the further supports that they may require. Please visit https://huronatwestern.ca/student-life-campus/student-services/wellness-safety for more information or contact staff directly:

Wellness Services:

huronwellness@huron.uwo.ca Community

Safety Office: safety@huron.uwo.ca

Additional supports for Health and Wellness may be found and accessed at Western

through, https://www.uwo.ca/health/.

Western Calendar - Policy Pages -

Academic Calendar - Western University (uwo.ca)