



Psychology 3227A (Fall 2021) Neuropsychology: Brain Injury Diagnosis, Treatment and Recovery

1. COURSE INFORMATION

Instructor: Dr. Jennifer Hoshoooley

Office: V209

Office Hours: Mondays 5:30pm – 6:30pm and by appointment

Time and Location of Lectures: Mondays 6:30 – 9:30pm; Classroom HC-H220

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. ~Required

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 tests on October 4th and November 15th, both worth 20% of your final grade. The tests will both be 2 hours long and occur in class. The final exam, also worth 20% of the final grade, will occur in the exam period as scheduled by the registrar. The final exam will be 2 hours in length. Test #2 and the final exam will not be cumulative. Both the tests and exam will cover material from lecture and assigned readings (textbook, papers, and our case study book, *Brain on Fire: My Month of Madness*). The format of the tests and the final exam will be multiple choice and short answer.

In addition to the tests and final exam, students will be graded on two case study reports (these reflection/exploration papers will each be worth 20% of your final course grade) examining our case study book, *Brain or Fire: My Month of Madness*. The details of this set of writing assignments and a marking rubric for them will be provided early in the course.

<u>Test</u>	<u>Date</u>	<u>% of Final Mark</u>
Test #1	Mon Oct 4	20%
Test #2	Mon Nov 15	20%
1 st Case Study Report	Mon Sept 27	20%
2 nd Case Study Report	Mon Nov 8	20%
Final Exam	TBA	20%

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 readings and 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 and to view refinements in the readings (specific pages that will be considered testable in each chapter).

Mon Sept 13:	Course organization and evaluation scheme Neuropsychology history & Neuroanatomy Review <i>Reading: Chapters 1 & 3</i>
Mon Sept 20:	Brain Imaging & Principles of Neocortical Function <i>Reading: Chapter 7 & Chapter 10</i>
Mon Sept 27:	Disconnection Syndromes <i>Reading: Chapter 17</i> 1 st Case Study Report (Based on Chapter 1-14) & DUE
Mon Oct 4:	Test #1 (Textbook Chapters 1, 3, 7, 10, 17. Case Study Book Chapters 1 – 14) 2 hrs in class – no lecture to follow
Mon Oct 11:	<i>No Class – Thanksgiving</i>
Mon Oct 18:	Neuropsychological Assessment Learning & Memory <i>Reading: Chapters 28 & 18</i>
Mon Oct 25:	Language & Spatial Behaviour

Reading: Chapter 19

Mon Nov 1:

No Class – Reading Week

Mon Nov 8:

Emotion - Reading: Chapters 20
2nd Case Study Report DUE

Mon Nov 15:

Test #2 (Textbook Chapters 18, 19, 20, 21,
28. Case Study Book Chapters 15 – 34) 2 hrs
in class – no lecture to follow

Mon Nov 22:

Paediatric and Adult Plasticity
Reading: Chapters 23 & 25

Mon Nov 29:

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.

Kempermann, G. (2019). Environmental enrichment, new neurons and the neurobiology of individuality. *Nature Reviews. Neuroscience*, 20(4), 235–245. <https://doi.org/10.1038/s41583-019-0120-x>

Mon Dec 6:

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>

Dale Stone, S. (2005). Reactions to invisible disability: The experiences of young women survivors of hemorrhagic stroke. *Disability and Rehabilitation*, 27(6), 293–304. <https://doi.org/10.1080/09638280400008990>

Examination Period: December 10-21, 2021



Appendix to Course Outlines: Academic Policies & Regulations 2021 - 2022

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.

Pandemic Contingency

In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, typically using a combination of synchronous instruction (i.e., at the times indicated in the timetable) and asynchronous material (e.g., posted on OWL for students to view at their convenience). Any remaining assessments will also be conducted online at the discretion of the course instructor. In the unlikely event that changes to the grading scheme are necessary, these changes will be clearly communicated as soon as possible.

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: <https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf>.

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:
https://www.uwo.ca/univsec/pdf/academic_policies/exam/attendance.pdf.

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: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf. 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, 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

Students who are seeking academic consideration for missed work during the semester may submit a self-reported absence form online provided that the absence is **48 hours or less** and the other conditions specified in the Senate policy at

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf are met.

Students whose absences are expected to last **longer than 48 hours**, or where the other conditions detailed in the policy are not met (e.g., work is worth more than 30% of the final grade, the student has already used 2 self-reported absences, the absence is during the final exam period), may receive academic consideration by submitting a Student Medical Certificate (for illness) or other appropriate documentation (for compassionate grounds). The Student Medical Certificate is available online at https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

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 Medical Grounds 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, and if the student has exceeded the maximum number of permissible Self-Reported absences, 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 [Student Medical Certificate](#). The instructor may **not** 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) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email huronsss@uwo.ca.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation where the conditions for a Self-Reported Absence have not been met, including where the student has exceeded the maximum number of permissible Self-Reported. All consideration requests must include a completed [Consideration Request Form](#). 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: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf. 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 huronsss@uwo.ca. An outline of the range of services offered is found on the Huron website 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-services/>

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

Student Quick Reference Guide: <https://huronatwestern.ca/student-life/student-services/#1>

Academic Support & Engagement: <http://academicsupport.uwo.ca/>

Huron University College Student Council: <https://huronatwestern.ca/student-life/beyond-classroom/hucsc/>

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

Mental Health & Wellness Support 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. 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

Chaplaincy: gthorne@huron.uwo.ca

Additional supports for Health and Wellness may be found and accessed at Western through, <https://www.uwo.ca/health/>.