

HURON UNIVERSITY COLLEGE
LONDON, CANADA

Psychology 3227A (Fall 2018)
Neuropsychology: Brain Injury Diagnosis, Treatment and Recovery

1.0 COURSE INFORMATION

Instructor: Dr. Jennifer Hoshoooley

Office: V126

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

Time and Location of Lectures: Mondays 6:30 – 9:30pm; Classroom HC-V207.

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.

2.0 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.

3.0 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 the assessment of these symptoms
- Have an understanding of what these symptoms can tell us about the normal functional organization of the human brain
- Have an appreciation for the neuroplastic capacities of the developing human and adult brain
- Have further evolved critical thinking and communication skills

4.0 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 have the opportunity to respectfully consider the various viewpoints of others in our class.

5.0 TEXTBOOKS

Kolb, B., & Whishaw, I. Q. (2015). *Fundamentals of Human Neuropsychology*. (Seventh Edition). New York: Worth Publishers. ~Required

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

6.0 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.

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.

There will be tests on October 15th and November 12th, 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/connection 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 15	20%
Test #2	Mon Nov 12	20%
1 st Case Study Report	Mon Oct 1	20%
2 nd Case Study Report	Mon Nov 5	20%
Final Exam	TBA	20%

7.0 Statement Regarding Grades in Psychology at Huron University College

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8.0 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 10:	Course organization and evaluation scheme Neuropsychology history <i>Reading: Chapter 1</i>
Mon Sept 17:	Neuroanatomy Review & Brain Imaging <i>Reading: Chapter 3 & Chapter 7</i>
Mon Sept 24:	Brain Imaging & Principles of Neocortical Function <i>Reading: Chapter 7 & Chapter 10</i>
Mon Oct 1:	Disconnection Syndromes 1 st Case Study Reflection (Based on Chapter 1-14) & Connections Writing DUE <i>Reading: Chapter 17</i>
Mon Oct 8:	<i>No Class - Thanksgiving</i>
Mon Oct 15:	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 22:	Neuropsychological Assessment Learning & Memory <i>Reading: Chapters 28 & 18</i>
Mon Oct 29:	Language & Spatial Behaviour <i>Reading: Chapter 19</i>
Mon Nov 5:	Emotion - <i>Reading: Chapters 20</i> 2 nd Case Study Reflection & Connections Writing DUE
Mon Nov 12:	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 19:	Brain Development, Plasticity - <i>Reading: Chapter 23 and</i> Plasticity, Recovery and Rehabilitation of the Adult Brain <i>Reading: Chapter 25</i>
Mon Nov 26:	Review Part 3 of Brain ofnFire Memoir +

Kleim, J. A. (2011). Neural plasticity and neurorehabilitation: Teaching the new brain old tricks.
Journal of Communication Disorders, 44, 521 – 528.

Mateer, C. A. (2013). Reconceptualizing brain injury rehabilitation in the future: A peek over the horizon. *Journal of head trauma rehabilitation, 28*, 232 – 236.

Mon Dec 3:

Bonus Assignment!

Kolb, B., & Muhammad, A. (2014). Harnessing the power of neuroplasticity for intervention. *Frontiers in Human Neuroscience, 8*, 377 – 385.

Silverberg, N. D., & Iverson, G. L. (2013). Is rest after concussion “the best medicine?”: Recommendations for activity resumption following concussion in athletes, civilians, and military service members. *Journal of head trauma rehabilitation, 28*, 250-259.

9.0 University Policies

The FASS Course Outline Appendix is posted on OWL and should be consulted for policies regarding academic accommodation, accessibility, university drop dates, and academic misconduct. Other important university information related to this course is also found in the Appendix.