

Psychology 897-003
Neurobiological Bases of Behavior & Fundamentals of Clinical Neuropsychology
Fall 2017

INSTRUCTOR	Leah M. Adams, Ph.D. Office: 3057 David King Hall (or 239E Johnson Center) E-mail: ladamse@gmu.edu Phone: (703) 993-4118
MEETINGS	Tues 4:30pm – 7:10 pm (Innovation 211)
OFFICE HOURS	Tues 2:00pm – 4:00pm (or by appointment)
DEADLINES	September 5 is the last day to add this class September 29 is the last day to drop this class (67% tuition penalty)

* Official Communications via GMU E-mail: Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate that account and check it regularly.

REQUIRED TEXT

Parsons, M.W., Hammeke, T.A., & Snyder, P.J. (2014). *Clinical Neuropsychology: A Pocket Handbook*. (3rd Ed.). American Psychological Association.

***STRONGLY RECOMMENDED* TEXT** (*it's a coloring book of functional neuroanatomy!*)

Pinel, J.P.J., & Edwards, M. (2008). *A colorful introduction to the anatomy of the human brain: A brain and psychology coloring book* (2nd Ed.). Boston, MA: Pearson Education, Inc.

RECOMMENDED TEXTS (*for folks considering neuropsychology or stronger bio emphasis ... or folks with extra coins*)

Lezak, M.D., Howieson, D.B., & Loring, D.W. (2012). *Neuropsychological Assessment*. (5th Ed.). New York, NY: Oxford University Press.

Morgan, J.E., & Ricker, J.E. (2008). *Textbook of clinical neuropsychology*. New York, NY: Taylor and Francis Publishers, Inc.

COURSE GOALS

This course is designed to help students develop an understanding of human functional neuroanatomy and basic brain-behavior relationships. Throughout the semester, students will become familiar with common neurological disorders and the neurological syndromes that characterize them. This class is not intended to train students to perform neuropsychological assessment or to provide the necessary training to become a full fledged neuropsychologist. Rather, it aims to reinforce the importance of the “bio” in the *biopsychosocial* model for psychologists.

By the end of this course, students will be able to:

- Describe key brain structures and functions
- Define and describe psychopharmacological interventions for mental illness, including indications, modes of action, and side effects/considerations of each medication class
- Define and describe clinical signs of common neurological conditions
- Demonstrate knowledge of professional, ethical, and cultural issues relevant to the practice of neuropsychology
- Begin to deduce specific neurological impairments/injuries given clinical information

COURSE REQUIREMENTS

- **Class Participation (25%)**
 - This class will be taught in a seminar format. It is expected that all students will contribute to each week's discussion. Pro tip ☺: It's difficult to participate when you're absent.
- **Exams (50% -- 2 @ 25% each)**
 - Two (2) take home, open note exams will be given. Students will have one week to complete each exam. Exam 1 will cover material from the "Neuroanatomy and neurophysiology" section and Exam 2 will cover material from the "Functioning brain" section of the course.
- **Final Exam (25%)**
 - Students will complete a mock "fact-finding" written exam in which they must reason their way to identifying a specific neurological incident/disorder given information about a fictional patient. Grading will be based on how the student arrives at their conclusion, rather than the accuracy of their findings. Students will have two weeks to complete the final exam. Further details will be discussed in class.

CANCELLATION POLICY

If class is canceled, students will be notified via their GMU email. The instructor will provide details regarding coursework and/or assignments.

EVALUATION & GRADES

Final grades will be assigned according to the following percentages (with normal rounding rules for decimals):

A	A-	B+	B	B-	C+	C	C-	F
93 - 100	90 - 92	87 - 89	83 - 86	80 - 82	77 - 79	73 - 76	70 - 72	< 70

EXAM & HOMEWORK POLICY

The following policy refers to all missed or late assignments or exams that you fail to let me know about beforehand. Not included in this policy are arrangements made beforehand with the professor (e.g., missing class for a religious holiday). There will be no extensions or make-ups without penalty except in instances such as the following:

- hospitalization or illness that has been documented and judged by your instructor as preventing you from a) preparing adequately for an exam or quiz, b) attending class, or c) completing an assignment
- death or serious illness in your family
- court appearances

Documentation must be provided by health officials (e.g., a physician or member of the student health center staff) in the case of illness; an immediate family member in the case of death or serious illness in the family; and official paperwork in the case of court dates. Decisions regarding extensions and make-ups under these circumstances will be made on a case-by-case basis.

HONOR CODE

All students in this course are to become familiar with and follow the University's honor code, which does not tolerate any form of cheating and attempted cheating, plagiarism, lying, and stealing. Exams and assignments are expected to be individual efforts unless otherwise noted by the instructor or teaching assistant. Violations of the GMU Honor Code can result in failure of an assignment or exam, depending on the severity of violation. All violations will be reported to the Honor Committee. The instructor for this course reserves the right to enter a failing grade to any student found guilty of an honor code violation. For more information on the Honor Code please visit: <http://academicintegrity.gmu.edu/honorcode/>

ACCOMMODATION OF DISABILITIES

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Services (DRC) at (703) 993-2474. **All academic accommodations**

must be arranged through that office. Note that this provision includes the range of disabilities, including physical, psychiatric, and learning disabilities.

STUDENT SUPPORT SERVICES

George Mason offers services to support students' academic and emotional development (yes, even for graduate students). Counseling and Psychological Services, located in SUB I room 3129 (<http://caps.gmu.edu/learning-services/>), offers workshops in academic skills, stress management training, and individual and group counseling for students who would like some help with social, emotional, or educational concerns. Consider taking advantage of these resources if you need them.

TENTATIVE SCHEDULE (subject to change owing to time constraints!)

*Note: Additional required readings are available on Blackboard

WEEK	DATE		
NEUROANATOMY AND NEUROPHYSIOLOGY			
1	8/29	Welcome! Let's talk neuroanatomy and neurophysiology	
2	9/5	More neuroanatomy! More neurophysiology! (gimme gimme more!)	
3	9/12	Neurotransmitters & Psychoactive Drugs	Ch 16 & 25
4	9/19	Neurotransmitters & Psychopharmacology	See Blackboard
THE FUNCTIONING BRAIN			
5	9/26	Somatosensory & Motor Systems	
6	10/03	Brain Off Day: Spinal Cord Injury	Exam 1 due
7	10/10	No class ☺	
8	10/17	Language & Vision-related Processing	Ch 18 & 19
9	10/24	Memory & Attention	Ch 17 & 20
10	10/31	Executive Functions & Emotional Processing	Ch 21
11	11/7	Case day!	Exam 2 due
NEUROLOGICAL ILLNESSES			
12	11/14	Neuropsychological Assessment (+ intro to fact-finding cases)	Ch 7 & 26
13	11/21	TBI & CTE Controversy Discussion	Ch 10 & see Blackboard
14	11/28	CVD, CVA, & Seizure	Ch 8 & 9
15	12/5	Dementias – Cortical & Subcortical (ending on a rough note)	Ch 11
Final Exam 12/19		Mock fact-finding case due to me via e-mail (ladamse@gmu.edu) by 7:15 pm	