Neuropsychology Methods PSY 892 Fall 2006

Time: Weds 4.30pm – 7.10pm Room: Enterprise Hall 173 Instructor: James Thompson Room 2068 David King Hall email: jthompz@gmu.edu

Office Hours: Weds 11am - 12pm or by appointment (email only)

Required Reading:

Heilman K & Valenstein E. (2003). *Clinical Neuropsychology* 4th Ed. Oxford University Press.

Additional Readings will be distributed in class.

Optional Additional Readings:

Farah MJ & Feinberg TE. (2006). Patient-based Approaches to Cognitive Neuroscience 2^{nd} Ed. MIT Press.

Lezak MD, Howieson DB, & Loring DW (2004). *Neuropsychological Assessment* 4th Ed. Oxford University Press.

Objectives: Neuropsychology provides a link between our knowledge of neuropathology, psychological assessment, and normal human cognition. This course is designed to provide students with an understanding of: a) the major neuropsychological syndromes; b) the pathology, assessment and diagnosis of these syndromes; and c) the implications of these syndromes to our understanding of normal cognition.

Content: This class will cover the major neuropsychological syndromes that result from brain injury or pathology, including: disorders of language, body schema, vision, executive function, memory, and emotion; the dementias; recovery and rehabilitation; how neuropsychology informs cognitive psychology; and new techniques (fMRI & TMS) in assessment.

Format: Classes will consist of a combination of lectures, class discussion, and demonstration of commonly used neuropsychological tests. Since much of the material covered in the course will be new to students, keeping up with background material will be critical. Prerequisites for the course are: basic (undergraduate-level) knowledge of cognitive psychology and neuroscience (or physiological psychology), or willingless to cover this ground through your own reading, and willingness to participate in class discussion.

Assessment: Assessment will consist of a case study (25%), term paper (25%), final exam (30%), and class discussion (15%).

<u>Case Study:</u> You will be given four case descriptions and need to write a brief report (1500-2000 words each) on two of these cases. The goal is to assess your understanding of test selection, assessment, and diagnosis of neuropsychological syndromes. The week before they are due we will discuss a number of example case studies in class.

<u>Paper:</u> The paper will take the format of a 'Research Focus' or 'News & Views' style mini-review (1500-2000 words) of an important primary paper from the cognitive neuropsychology literature, placing it in context and discussing its significance to the understanding of normal cognition. The choice of paper is up to you, but you MUST discuss it with me first to check its suitability. The week before they are due we will discuss a number of example papers in class.

Total 100 points, letter grades as follows:

A: 90-100 A-: 87-89 B+: 84-86 B: 80-83 B-: 77-79 C: 70-76 F: 0-69

Attendance: While you will not be graded on attendance, this is a graduate-level course and you are expected to attend each week.

GMU Honor Code: George Mason University has a code of Honor that each of you accepts by enrolling as a student. You should read and become familiar with this code at http://mason.gmu.edu/%7Emontecin/plagiarism.htm. The expectation is that all of the work you do for this class will be the work of one individual. However, you are fully encouraged to discuss the readings and topics raised in this class with your fellow students.

Students with Disabilities: If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center C(DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

Exam Make-up Policy: You may take a test after the scheduled date only if you (a) receive my permission before the day of the test, or (b) have a valid excuse (e.g., a note from a doctor). Papers will not be accepted beyond the due date. Homework assignments will not be accepted late.

Deadlines:	Last Day to Add	September 12, 2006
	Last Day to Drop	September 29, 2006

SCHEDULE

Date Aug 30 th	Topic Introduction & Issues in Neuropsych Assessment	Reading AAN Report (in class)	Due Dates
Sep 6 th	Major Pathologies	Lezak Ch7 (in class)	
Sep 13 th	Language	Heilman Ch2	
Sep 20 th	Memory	Heilman Ch18	
Sep 27 th	Executive Function	Heilman Ch15	
Oct 4 th	Vision & Recognition	Heilman Ch8, Ch12 (pp237-262)	
Oct 11 th	Neglect	Heilman Ch13	
Oct 18 th	Case Studies	In class	
Oct 25 th	Body Schema & Action	Heilman Ch11, Ch9 (pp172-180).	Case Studies Due
Nov 1 st	Dementia	Heilman Ch19	
Nov 8 th	Emotion & Neuropsychiatric Disorders	Heilman Ch16	
Nov 15 th	New techniques	In class	
Nov 22 nd	Cognitive Neuropsychology	In class	
Nov 29 th	Recovery and Rehabilitation	Heilman Ch20	Paper Due
Dec 6 th	Review		
Dec 13 th	Exam		