Psych 410x: Behavioral Neurology
Course Syllabus for Fall 2008
Wednesday 3:10-6:00
Kildee 105

Instructor: Dr. Robert West
Office Hours: MW 8:30-9:30
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by appointment
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Course web page: WebCT

Course Description:

In this course we will examine the neurological basis of perception, cognition, and affect within the tradition of behavioral neurology. The course is designed to give students some degree of latitude with regard to pursuing their own interests with the general materials to be covered in class. This flexibility comes both from an ability to select readings of relevance for each week and to explore a topic in greater detail through an in-class presentation and book review toward the end of the semester.

Each week students will be responsible for the assigned readings and one additional empirical paper related to the topic under consideration for that week. Students will prepare type written responses to nine questions related to the paper they select (see below). Examples of journals that could serve as a resource for these papers include (Cerebral Cortex, Brain, Cortex, Neuropsychologia, Brain and Cognition, Brain and Language, Journal of Cognitive Neuroscience, Journal of Neuroscience); there are of course others. Each week I will present a general overview of the topic under consideration for that week in the first ½ of the class. In the second ½ of each class meeting a pair of students will lead the discussion of the article assigned to all students and together the class will discuss the individual readings selected by students. Part of the “class discussion” grade will come from the opportunity. For the last two weeks of class students will present a 15-20 minute overview and discussion of a topic of their choice related to some area of behavioral neurology.

Course Requirements and Grading:

Your grade in the course will be defined by performance on the weekly questions, class attendance, class participation (formal and informal), the in-class presentation, a five page review of a popular neurology book, and the final examination. Late materials will not be accepted and missing a scheduled presentation is tantamount to receiving a zero for that assignment.
Weekly article summaries: 12@9 = 108 (due on Wednesday of a given week)
Attendance 15@2  30
Class discussion 30
Presentation 50
Paper 50
Final examination 100

A: 94-100  C: 73-76
A-: 90-93   C-: 70-72
B+: 87-89   D+: 67-69
B: 83-86    D: 63-66
B-: 80-82   D-: 60-62
C+: 77-79   F: < 60

Questions for Weekly Article Summaries:

In your written article summaries for each week you need to provide answers for the following questions:

1) What was the primary question of interest in the study?
2) What were the specific hypotheses under investigation in the study?
3) What was the etiology of the individuals tested in the study?
4) What tasks, behavioral methodologies, or imaging methods were used in the study?
5) What types of statistics were used to analyze the data?
6) What were the critical findings of the study?
7) What were the major conclusions of the study?
8) What were the significant limitations of the study?
9) Based in your knowledge of behavioral neurology what would you have done differently?

Titles for Book Review and Structure of the Assignment:

The critical book review represents a 5 page double spaced typed summary of one of the books listed below or an alternative as approved by the instructor. In this paper the student will provide an overview of the major themes and ideas presented in one of the books as well as some personal reflection and analysis of the cases or ideas that are presented. In writing the review students might want to consider the following questions: 1) What was the central message of the book, 2) How do the ideas discussed in the book converge or diverge with what you have learned about behavioral neurology over the course of the semester, 3) How has reading the book changed your view of the specific disorders that were under consideration, 4) What novel theory has the book introduced to the scientific community, 5) What are some of the limitations of the arguments made in the book. The paper is due on December 3 at 3:10 pm.


Others as approved by instructor.

**Class Policies:**

Academic Dishonesty: Procedures for dealing with academic dishonesty (cheating, plagiarism, etc.) will follow university guidelines. See the ISU student handbook for details.

Students with disabilities: If you have a documented disability and anticipate needing accommodation in this course, please make arrangements to meet with me ASAP. Please also request that a Disability Resources staff member send a Student Academic Accommodation Request (SAAR) form verifying your accommodation. The Disability Resources office is located in the Student Services Building, Room 1076. The phone is (515) 294-6624 or TDD (515) 294-6335.

**Topics and Schedule:**

August  27  Course overview and methods in neural science
       Farah & Feinberg Chapters 1-2, 7

September  3  Agnosia
       Farah & Feinberg Chapters 8-12
10 Neglect
Farah & Feinberg Chapters 14-15

17 Aphasia
Farah & Feinberg Chapters 16-18, 37

24 Emotion

October 1 Amnesia
Farah & Feinberg Chapters 24-27

8 Executive function
Farah & Feinberg Chapters 22-23

15 Social cognition
22 Callosal disconnection and plasticity
Farah & Feinberg Chapters 6, 30

29 Dementia
Farah & Feinberg Chapters 31-32

November 5 Neurodegeneration (Parkinson’s and Huntington’s disease)
Farah & Feinberg Chapters 33

12 Lifespan development
Farah & Feinberg Chapters 34-36, 38

19 Psychiatric disorders

26 (Thanksgiving)

December 3 Student presentations I

10 Student presentations II