Psych 410: Behavioral Neurology
Course Syllabus for Fall 2012
Wednesday 3:10-6:00
Physics 39

Instructor: Dr. Robert West
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Course web page: Blackboard Learn

Office Hours: MWF 11:00-12:00 by appointment

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. 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 part of class. In the second part of each class meeting two students will present overviews of the articles that they selected to read that week, and the class will discuss these and related materials from the articles that other students selected. Students should turn in a hard copy of the article s/he selected that week. Part of the “class discussion” grade will come from this opportunity. For the last two weeks of class students will present a 15-20 minute overview and discussion of a topic of their choice (as approved by the instructor) related to some area of behavioral neurology.

Course Requirements and Grading:

Your grade in the course will be defined by performance on the article presentation, class attendance, class participation (formal and informal), the in-class presentation, a five page review of a popular neurology book, and the midterm and final examinations. Late materials will not be accepted and missing a scheduled presentation is equivalent to receiving a zero for that assignment.
Attendance                          15@1 15
Class discussion                   15
Article presentation               20
Presentation                       50
Paper                              50
Mid-term                           50
Final examination                  50
                                      250

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 Article Presentations:

In your article presentations you should answer 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?

These questions should be addressed in a presentation format using Powerpoint or a similar presentation program. You should feel free to include your own summary text as well as figures from the article. You may want to avoid capturing tables from articles as these often result in very small values that are difficult to read when projected. The instructor will provide a computer running Powerpoint 2010 for Mac, you are also free to bring your own machine for the presentation.

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 5 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 disability and require accommodations, please contact the instructor early in the semester so that your learning needs may be appropriately met. You will need to provide documentation of your disability to the Student Disability Resources (SDR) office, located on the main floor of the Student Services Building, Room 1076, 515-294-7220.
Topics and Schedule:

August 22 Course overview and methods in neural science  
Farah & Feinberg Chapters 1-2, 7

August 29 Agnosia  
Farah & Feinberg Chapters 8-12  

September 5 Neglect  
Farah & Feinberg Chapters 14-15  

Aphasia  
Farah & Feinberg Chapters 16-18, 37  

Emotion (Meets on September 17 – Lagomarcino 139)  

Amnesia  
Farah & Feinberg Chapters 24-27  

October 3 Executive function (Mid-term Exam)  
Farah & Feinberg Chapters 22-23  
10 Social cognition

17 Callosal disconnection and plasticity
Farah & Feinberg Chapters 6, 30

24 Dementia
Farah & Feinberg Chapters 31-32

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

November 7 Lifespan Development
Farah & Feinberg Chapters 34-36, 38

14 Psychiatric disorders
21  (Thanksgiving)

28  Student presentations I

December 5  Student presentations II