



## Course Requirements

- *Exams*
  - Three exams (including the final) will test your knowledge of the information we cover in class and in the readings/film and your ability to critically evaluate related material. A review sheet will be posed on-line at least 1 week in advance of the test.
  - If you will not be in class on the day a test is scheduled, you must let me know at least 3 days in advance in order to schedule a make up time. Without advance notice, tests cannot be made up. Any changes to the test dates will be announced both in class and on the class web site two weeks in advance. Tests can be taken before the official test date if necessary.
  - Each exam is worth 15% of your grade.
  
- *Class participation*
  - Class sessions will consist of lecture, discussion and group activities and I expect active participation from each member of the class. To help facilitate class preparation and participation, students will be provided with a set of questions to consider for each reading. By considering answers to these questions you not only prepare yourself for class discussion but will inevitably remember more from your reading.
  - Participation is worth 5% of your final grade. Your grade will reflect the quality of your class participation, your level of involvement in class discussion and general attendance. A willingness to pose questions, either regarding material you didn't understand or issues you disagree with, will also be considered in the final participation grade.
  
- *Response Papers*
  - To promote thoughtful and active reading of the assigned chapters, and to help prepare you to contribute to class discussion in an articulate and informed manner, you are expected to turn in 9 of 12 possible response papers (indicated by \*\* on the calendar). The typed (double-spaced) one-page paper will include (a) a question you can pose to the class, based upon the reading, that cannot be answered solely with facts from the assignment (b) a quotation from the reading that you find particularly compelling and your subjective reaction (c) a brief outline of ideas prompted by the reading that could be used in class discussion. Please note that this is not to be a summary of the reading but your response and analysis of its ideas.
  - Your papers will be graded on a 3 point scale: 3 = outstanding (thoughtful question that invites analysis, synthesis, evaluation, or makes connections between the reading and previous discussion or readings), 2 = good (goes beyond the reading, but prompts little discussion), 1 = poor (confusing question or one that can be answered from the facts in the chapter), or 0 = not handed in on time.
  - Together, the response papers are worth 15% of your final grade.

- *Research paper:*
  - *Option 1: Controversies in Neuropsychology*
    - Currently, the field of neuropsychology is seeing an explosion of research, owing much to the increased sophistication of relevant technology and increased contact between researchers trained in a variety of fields (computer science, clinical psychology, psychiatry, philosophy, neuroscience). Given this dramatic increase in research, it is not surprising that a number of scientific controversies are currently under great debate in the neuroscience area.
    - For your research paper, you will either generate a research question (you must get approval from me) or choose one from a list I have developed (see bottom of page). The focus of your paper is to introduce each side of the debate, present a balanced discussion of the relevant research then discuss which side you find most compelling and support your argument.
  - *Option 2: Original research proposal*
    - A fundamental component of psychology is designing, conducting, and reporting empirical research. To initiate you into the process you will *design* a novel experiment during the semester.
    - You should pose a research question that is interesting to you and potentially pursuable (either as a research assistant or early graduate student). You will write a report of your proposed experiment, relevant background information, its predicted outcome (with justification) and explanation of why this research is important and relevant to the field.
    - Proposals will be comprised of introduction, methods, *hypothesized* results and discussion and reference sections written in adherence to the style specified in the APA guidelines.
  - General guide lines for either research paper option:
    - **You are expected to meet with me by 9/25 to discuss your paper topic regardless of which paper type of topic you choose.**
    - You will use recent scholarly sources (published within the last 8 years); this includes peer-reviewed journals, scholarly books and websites (I will provide a list of acceptable websites; other websites must be approved before inclusion into your research paper).
    - Your grade will reflect the accuracy of your research, the degree to which your presentation is balanced/complete and the sophistication of your arguments and writing.
    - Each paper should be no more than 10 pages, typed, and double-spaced. A handout will be provided with more specific instructions. The paper is worth 12% of your final grade.
    - These papers will be peer-reviewed by another student and these peer reviews will be graded by me for quality and completeness (3% of grade).
    - Associated due dates:
      - ? **Draft to be peer-reviewed: 11/15 (2 copies)**
      - ? **Peer reviews completed: 11/27**
      - ? **Final draft: 12/8**

*Suggestions for possible paper topics:*

- Do left-handed people face greater pathology and die sooner than right handed people?
- In what ways can placebo effect be used to treat or reduce pain and disease?
- Can we explain the effects of acupuncture using existing knowledge of the nervous system?
- Are faces processed differently from other complex visual stimuli?
- How is sign language represented in the brain?
- Do ultrasound scans increase the risk of brain damage in a fetus?
- In what ways do stem cell research show promise in treating neurological dysfunction? What are the biological limitations of such therapy?
-

### *Patient case studies*

- All together, the case study project is worth 20% of your grade.
- To help facilitate interest and understanding of neuropsychological conditions and methods of assessment, you will complete 3 assignments, over the course of the semester, which center on case studies of neuropsychological patients.
- For the first assignment, each group will be provided with a brain scan indicating some type of brain damage. You must determine, based upon the location of this damage, what kinds of behavioral and cognitive changes the patient is likely experiencing. Based upon your research of this brain region and the functions it performs, you should develop a realistic case study of the patient in question (8-12 pages). Writing as if you are the patient's neurologist, discuss the behavior changes that the patient or his/her family have noticed in the patient's behavior. This should be as thorough as possible to address the complete range of behavior changes that would be expected following your assigned damage. All together, the report should be as complete as possible regarding the changes (major and minor) that the patient is experiencing.
  - To give your patient a bit of individuality, it would be reasonable to state that some specific behavior changes might be expected with this type of damage but that you patient is not necessarily showing them.
  - Or, you could make your patient suffer every possible cognitive dysfunction that could conceivably result from his/her type of damage.
  - **This assignment is due on September 20<sup>th</sup>.**
  - This assignment will be graded by me and your group will need to make the changes I have requested because this report will be used for the second part of the assignment.
- For the second assignment, you will receive a patient case study that another group developed as part of assignment 1. Based on this information and your own research, your group will then determine which neuropsychological tests would be most appropriate to specifically diagnose the damage. In your report, (8-10 pages) you must address at least 5 tests that are appropriate given your new patient's symptoms. In your report you should indicate why you chose these tests, how the patient deviated from normal (if they deviated) and what you can learn from the patient's performance on these tests. This report will reflect both your understanding of the neuropsychological condition under study and the particular neuropsychological measures that you chose.
  - **This assignment is due on November 6<sup>th</sup>**
  - This assignment will be graded by me and your group will need to make the changes I have requested because this report will be used for the third part of the assignment.
- For the third assignment, you will receive the case study and neuropsychological test results for a 3<sup>rd</sup> patient. The goal of the 3<sup>rd</sup> assignment is to develop a presentation for the class that summarizes the findings reported by the previous groups and provides this information in an interesting and creative fashion.
  - Grades for this assignment will reflect the accuracy, completeness, creativity and interactivity of the presentation.
  - Each presentation will be roughly 20 minutes.
  - **All presentations will be scheduled for December 6<sup>th</sup>**

## Schedule of Topics

Class	Topic	Reading
M 8/28	Introduction	
W 8/30	History	Z&S: 4-35
M 9/4	No class	
W 9/6	Macroanatomy	Z&S: 64-109
M 9/11	Microanatomy	Z&S: 40-63
W 9/13	Learning & Plasticity **	Le Doux: 134-173
M 9/18	Methods of investigating the brain	Z&S: 190-223
W 9/20	Neuropsychological assessment	Z&S: 440-446; 468-491
M 9/25	Laterality	Ogden: 328-361
W 9/27	Exam 1	
M 10/2	Visual agnosia **	Ogden: 137-157
W 10/4	Neglect	171-184; Ogden: 99-113
M 10/9	Aphasia **	Ogden: 83-98; <a href="#">On-line reading</a>
W 10/11	Executive function	Ogden: 158-170
M 10/16	Executive function **	LeDoux174-199
W 10/18	Memory: Anterograde Amnesia	157-170; Ogden: 46-63
M 10/23	Memory: Retrograde amnesia **	Memory reading
W 10/25	Traumatic brain injury	Ogden:171-203
M 10/30	Exam 2	
W 11/1	Developmental disorders	Z&S: 228-259
M 11/6	Learning disabilities & ADHD**	Z&S: 260-272; 282-293
W 11/8	Autism **	272-282; Autism reading
M 11/13	Emotion **	Emotion reading
W 11/15	Alzheimer's **	Z&S: 356-379; Ogden: 317-327
M 11/20	Parkinson's **	Z&S: 384-393; Ogden:254-275
W 11/22	No class (Friday schedule)	
M 11/27	Sleep	Z&S: 407- 425; sleep reading
W 11/29	Alterations of consciousness**	Z&S: 425-435; Ogden: 64-82
M 12/4	Who are we? **	LeDoux 301-324
W 12/6	Presentations	
M 12/11 2:30 -5:30		