Psychology 561
Advanced Neuropsychology Seminar

Instructor: Amy Spilkin, Ph.D.
Office Hours: Before and after class and by appointment
Location: To be announced
Email: aspilkin@gmail.com (best way to reach me, please allow 24 hours for response)

Prerequisite: Psychology 360 or 361 or grade of B or better in Psychology 260

Materials:
Laptop computer
Paper/pens/pencils

Course Description:
This course is an advanced examination of the brain-behavior relationships of major neuropsychological deficits and disorders. This course will take an interdisciplinary approach integrating information from several subfields of medicine (neurology, neuroradiology and psychiatry) and psychology (cognitive, abnormal, developmental, biological, health psychology). Emphasis will be on clinical presentation and neuroanatomical correlates, with discussion of commonly used assessment tools. Students will acquire knowledge through review of both clinical cases and research outcomes. A large part of this course will consist of presentations and discussing various aspects of neuropsychology.

Course Objectives
- an thorough understanding the different aspects of neuropsychology including basic neuroanatomy, research findings, clinical assessment, case studies
- an ability to understand and synthesize complex neuropsychological material

Class Organization
This class will consist primarily of lectures, student presentations, and class discussions. Videos and in-class activities will be incorporated into the schedule whenever possible. Questions about videos and activities are “fair game” for the exams.
Required Assignments:

- **Class attendance**
  Attendance is expected and will contribute to your success in this course. Participation/attendance will be worth 5% of your grade.

- **Reading of text: Fundamentals of Neuropsychology, Kolb and Whishaw and Scientific American Reader**
  You will be required to read all of the chapters/articles assigned in the syllabus. For the Scientific American articles, each week, you will be required to turn in two questions/thoughts/critiques of the article you read. These will be used in our class discussions of the articles.

- **Additional readings**
  Information on any additional required readings will be placed on Blackboard. Be sure to check Blackboard on a regular basis.

- **Exams**
  There will be two exams, each of which will be worth 50 points. Exams will include multiple choice and essay questions. Latecomers will not be allowed to take the test. There will be no make-up exams except in cases of a verifiable emergency situation.

- **Student Presentations**
  Each student will be responsible for 2 presentations throughout the semester.

  1) Each student will present a chapter from our Kolb and Wishaw text. As part of the presentation, the student will integrate an assigned neuropsychological topic. The presentation should be approximately 30-45 minutes in length.

  The idea of these presentations is to review sections of the chapter with the class, and present information about a neuropsychological topic/condition related to your chapter. You may want to present information on your specific topic based on peer-reviewed journal articles, review articles, and/or case studies.

  **Points:** This process is worth 15 points.

  - 5 points: Come to class with your outline
  - 10 points: Do your presentation on the day scheduled

  You will be working either alone or in pairs. If you choose to work alone, you will be doing one chapter presentation during the quarter. If you work in pairs, you will be doing two presentations during the quarter.
You will be randomly drawing a general topic that you will be presenting on. Each topic is tied to a specific presentation date on the syllabus.

You will need to present a review of the chapter to which you were assigned. Remember, everyone has read the chapter so you do not need to present every detail. Try to focus on a presentation of the most important points. You will also want to do a literature search on your assigned topic to find research articles, review articles and/or case studies to give students information about the neuropsychological topic you were assigned.

Since the interest level of this course is, in part, determined by your presentations, we will be having a contest for the MOST INTERESTING PRESENTATION! On the last day of class, we will all vote for the most interesting presentation that was presented during the semester (there will be a prize). Take the time to create an interesting presentation. You may incorporate demonstrations, videos, etc.

You should also prepare an outline of your presentation (or a printout of your slides), which should be copied for all of your classmates and for me (12 copies). You will turn your outline in the day of your presentation.

Your presentation should be approximately 35-45 minutes in length; approximately 30-35 slides. You must create a Powerpoint presentation and email it to me the day before your presentation by 6 pm in order to get full credit for this assignment. Feel free to be creative during your presentation and try to engage the audience.

Have fun with this assignment!

2) Each student will present their proposal for a new test of executive functioning (see below; approximately 10-15 minutes)

• Final Project: Create a proposal for a new test of Executive Functioning

The cognitive domain of executive functioning encompasses a wide range of human behavior and has received increasing attention in recent years. It is your final task to create a proposal for a new test of a specific aspect of executive functioning. You will be required to create the test materials, directions, and scoring guidelines. You will present the test to the class. Also, you will be responsible to present key neuropsychological data you would need to obtain regarding the test such as the brain area you believe this test would tap (and why — use references), the types of validity and/or reliability data that you would need to get for this test, and any other psychometrics that would be applicable.
PRESENTATION OF YOUR TEST OF EXECUTIVE FUNCTIONING IS CONSIDERED THE CULMINATION OF THIS COURSE. YOU MUST BE AT THE FINAL CLASS OF THE SEMESTER TO PRESENT YOUR TEST OF EXECUTIVE FUNCTIONING OR YOU WILL NOT BE ABLE TO PASS THIS CLASS.

• Critiques of Executive Functioning Tests
  During the final class, you will be responsible for writing down a total of 1 thought/critique for each of your classmates’ tests of executive functioning.

• Grading
  There are approximately a total of 143 points possible in this class.
  
  2 exams (50* points each)  100
  Chapter presentation 15
  Executive Functioning Presentation 10
  Executive Functioning Thoughts 5
  Attendance/Participation/Questions on Scientific American articles 10
  140 pts

  Students will be able to see where they stand in the class by accessing Blackboard.

  GRADING

  Students will receive a letter grade based on the % of points they have accumulated at the end of the course. The following guidelines will be used:

  A  94-100%  B+  87-89%  B-  80-83%  C+  77-79%  C-  70-73%  D+  67-69%  D-  63-60%  D  64-66%  F  ≤59%

  Class Cheating and Plagiarism Policy
  * Plagiarism is defined as “the act of incorporating ideas, words, or specific substance of another, whether purchased, borrowed, or otherwise obtained, and submitted to the University as one’s own work to fulfill academic requirements without giving credit to the appropriate source.” In this course, plagiarism refers to copying any material from any published or unpublished (written work from another student) work as your own. It is expected that you independently prepare all assignments for this course.
  * Plagiarism or cheating will result in a failing grade for the semester, and will be reported to the SDSU Office of Judicial Affairs for investigation.
• **In Class Computer Policy**

Computers are only to be used for the purposes of note-taking in class. They are not to be used for sending email, surfing the web, etc. For this reason, computers may not be open during any student presentations. You will be given an outline of the article from the presenter and may take any additional hand-written notes on the outline. They may only be open during my lecture portion of the class for note-taking purposes only. Participation points will be deducted for students using computers during class for anything not related to taking notes in Psych 561.
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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
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<tr>
<td>8/29</td>
<td>• Introduction to Psychology 561&lt;br&gt;• Presentation assignments&lt;br&gt;• Begin work on presentations</td>
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<tr>
<td>9/5</td>
<td>• Labor Day – no class&lt;br&gt;• Work on presentations</td>
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<td>9/12</td>
<td>• Neuroimaging, guest lecture&lt;br&gt;• Secrets of the Mind</td>
<td>• Chapter 6 (no presentation)</td>
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<td>9/19</td>
<td>• The Practice of Neuropsychology&lt;br&gt;• Psychometrics&lt;br&gt;• Test Selection</td>
<td>• Chapter 1 (Miguel Martin Del Campo)&lt;br&gt;• Chapter 28 (no presentation)&lt;br&gt;• Scientific American “Diagnosing Disorders” pp 98-105</td>
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<td>9/26</td>
<td>• General Cognitive Functioning&lt;br&gt;• Disconnection Syndromes</td>
<td>• Chapter 11 (Rosemary Meza)&lt;br&gt;• Chapter 17 (Elizabeth Orient)&lt;br&gt;• Scientific American “Islands of Genius” pp 8-17</td>
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<td>10/3</td>
<td>• Neurological Disorders&lt;br&gt;• Attention</td>
<td>• Chapter 26 (Bob Moulton)&lt;br&gt;• Chapter 22 (Charles Van Liew)&lt;br&gt;• Scientific American “Informing the ADHD Debate” pp 2-7</td>
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<td>10/10</td>
<td>• EXAM 1&lt;br&gt;• Guest speaker, Dr. David Moore, Neuropsychology of HIV</td>
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| 10/17 | Executive Functioning  
Variations in Cerebral Asymmetry                        | Chapter 16 (Melissa Cervantez)  
Chapter 12 (Callie Hoebel)  
Scientific American “Brian Wilson: A Cork on the Ocean” pp. 68-75 |
| 10/24 | The Influence of Drugs and Hormones on Behavior  
Learning and Memory                                      | Chapter 7 with focus on pages 170-188 (Leeza Andersen)  
Chapter 18 (Stephanie Oleson)  
Scientific American “The Mutable Brain” pp 26-33 |
| 10/31 | Language  
Secrets of the Wild Child                                          | Chapter 19 (Daniel Badal)                                                                   |
| 11/7  | Visuospatial  
Brain Development and Plasticity                                  | Chapter 21 (Yuli Cabrera)  
Chapter 23 (Johanna Baker)  
Scientific American “Personality Crash” pp. 76-81                                           |
| 11/14 | Emotion & Psychiatric Disorders  
Pediatric Neuropsychology                                               | Chapter 20 (Claudia Guzman)  
Chapter 27 (Amanda J. Khan)  
Chapter 24 (Merage Ghane)                                                   |
| 11/21 | Effort, Recovery of Function, Interventions  
Ethics  
Mindwars                                                               | Chapter 25 (Diane Nicoll)  
Scientific American “A Great Attraction” pp 82-87                                             |
| 11/28 | EXAM 2                                                                 |                                                                                               |
| 12/5  | Presentation of Executive Functioning Test                             |                                                                                               |