**PSYCHOLOGY 580**  
**ADVANCED PHYSIOLOGICAL PSYCHOLOGY**  
**(CLINICAL NEUROPSYCHOLOGY )**

**RICHARD MILLER, PH.D.**  
227 TPH, 745-2450  
E-mail: richard.miller@wku.edu  

**SPRING 2009**

**TEXTBOOKS:**  
*Fundamentals of human neuropsychology, 6th edition* by Kolb and Whishaw  
(REQUIRED)

**COURSE OBJECTIVE:** This class is intended to provide a clinical practitioner's perspective on brain functioning. We will cover material on structure and function of the brain with a strong emphasis on brain damage. The class will also focus on assessment methods which are used to determine range of function following damage.

**CLASS ATTENDANCE:** The university policies in respect to attendance will be followed. Frankly, in a graduate class, attendance is expected.

**STUDENT DISABILITY POLICY:** In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center.

Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

**COURSE GRADE:** Your grade in this course will be determined by four integrative exams which are not cumulative in nature. By necessity, the sections of material are not mutually exclusive; therefore, you cannot automatically discard a prior unit's content after completion of the exam on it. Dates for these exams will be announced.

Grades will be posted here by last four digits of your student ID number.

**BACKGROUND MATERIAL:** This course presumes you have completed an undergraduate course in physiological psychology. We will spend no more than two class periods on background and then begin at chapter 10 in the text. No mastery exam will be required for those who have not completed a course in physiological psychology.
<table>
<thead>
<tr>
<th>Class CD 3</th>
<th>Class CD 4</th>
<th>Class CD 5</th>
<th>Class CD 6</th>
</tr>
</thead>
</table>

**COURSE CONTENT:** This course presumes a basic background of an undergraduate course in physiological psychology. Those of you who have not acquired such materials should gain closure on chapters 3-7 immediately. I will highlight the basic structure of the nervous system for the first several class periods and then begin on chapter 10. The following listing indicates the topic coverage and sequence for the course. As can be seen, we will cover a substantial amount of material. Please keep up with your reading. Listed below are tentative dates and materials to be covered for our exams. All of these are subject to change; consequently, you should monitor this site frequently.

- Neocortical function (chapter 10)
- Principles/ variations of cerebral asymmetry (chapter 11 & 12)
- Occipital lobes (chapter 13)
- Parietal lobes (chapter 14)
- Temporal lobes (chapter 15)
- Frontal lobes (chapter 16)
- Memory (chapter 18), Language (chapter 19)
- Emotional processes (chapter 20)
- Psychiatric and motor disorders (chapter 27)
- Neuropsychological assessment (chapter 28)

**SUPPLEMENTARY RESOURCES:** The following references will provide additional information on the topical coverage in the course.


INTERNET SITES:

- [http://www.mentalhealth.com/fr20.html](http://www.mentalhealth.com/fr20.html) (Tourette's Disorder [go to Guide to Diagnosis and Treatment of TS])
- [http://www.mentalhealth.com/fr20.html](http://www.mentalhealth.com/fr20.html) (manic-depression section of Internet Mental Health)
- [http://www.mentalhealth.com/fr20.html](http://www.mentalhealth.com/fr20.html) (depression section of Internet Mental Health)
- [http://www.mic.ki.se/Medimages.html](http://www.mic.ki.se/Medimages.html) (site has numerous links to a wide range of medical topics)
- [http://www.sciencedaily.com/releases/1999/03/990325105542.htm](http://www.sciencedaily.com/releases/1999/03/990325105542.htm) (Frontal lobe damage and humor)
- [http://www.ect.org/effects/lobe.html](http://www.ect.org/effects/lobe.html) (Frontal lobe pathology)
- [http://www.uoregon.edu/~mtrctl/ems610/driver.pdf](http://www.uoregon.edu/~mtrctl/ems610/driver.pdf) (Parietal neglect syndromes)
• http://www.neuroskills.com/index.html?main=tbi/bparieta.shtml (parietal lobe damage)
• http://www.sciencedaily.com/releases/1999/04/990422061106.htm (gender differences in the brain)
• http://www.sfn.org/briefings/ (A wide range of neuroscience topics on brain function, disease and damage)
• http://www.neurophys.wisc.edu/brain/ (A superior site for brain anatomy)
• http://www.neuropsychologycentral.com/ (An excellent neuropsychology site)
• http://neuro.med.cornell.edu/VL/ (Overwhelmingly comprehensive listing of neuroscience sites)
• http://www9.biostr.washington.edu/da.html (Interactive brain atlas)
• http://hcs.harvard.edu/~husn/BRAIN/index.html (Harvard undergraduate Brain publication)
• http://www.ndmda.org/ (National Depressive and Manic-Depressive Association)
• http://dura.stanford.edu/Articles/Psychosurgery.pdf An article from Brain Research on psychosurgery
• http://www.cerebromente.org.br/n02/historia/psicocirg_i.htm A history of psychosurgery by Sabbatini
• http://www.worthpublishers.com/newcatalog.aspx?isbn=0716753006

Revised 11/30/04