LIN/CSD 350: Language and the Brain  
(Unique numbers #41485, #06335)  
Fall 2009  
TTh 12:30-2:00pm, BUR 212

Instructor  
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Course Description:
This course is designed to provide information and theory regarding language representation in the human brain. No prior background is assumed as a complete grounding in human neuroanatomy and neurophysiology is provided. Topics to be discussed include: (1) localizationist vs. holistic arguments for language representation in the brain; (2) brain scanning (PET, FMRI) studies; (3) the neuropathology of speech-language disturbance following brain injury, i.e., aphasia; (4) left-right hemispheric specializations. The format is informal lecture-style with class participation encouraged.

Textbook:
There is no textbook.
Course packet (required) is available from Jenn’s Copy and Binding: www.jennscopies.com
The course packet is adapted (with permission) from that of Harvey Sussman’s.
Additional materials will be made available on Blackboard.

Course Schedule:
(subject to change depending on time constraints, the needs of the class, and students’ interests)

Topic I: The Structure of the Brain: Neuroanatomy and Neurophysiology  
(Aug 27, Sep 1, 3, 8, 10, 15, 17, 22, 24)  
• Introduction  
• The neuron: basic structure and neural communication  
• The central nervous system  
  Test 1: Sep 29 (100 points)

Topic II: Cortical and Subcortical Language Representation  
(Oct 1, 6, 8, 13, 15, 24)  
• Historical background: holist vs. localizationist philosophies  
• Research methodologies for language representation in the central nervous system  
  Test 2: Oct 20 (100 points)
**Topic III: Language breakdown**  
(Oct 22, 27, 29, Nov 3, 5, 10)  
- Causes for aphasia  
- Classical descriptions of aphasia: Broca’s, Wernicke’s, Conduction aphasia  
- Agrammatism and asyntactic comprehension  
- Semantic deficits  
- Polyglot aphasia, aphasia in the deaf  

Test 3: Nov 12 (100 points)

**Topic IV: Hemispheric Specialization for Language**  
(Nov 17, 19, 24, Dec 1)  
- Anatomical evidence and experimental techniques  
- Split-brain studies  
- The role of the right hemisphere in language  
- Animal lateralization studies  
- Hemispheric processing of morphology; prosody  

Test 4: Dec 3 (100 points)

**Grading:**  
Grading will be determined by four tests, one per major topic area. All tests will be objective, short answer type (multiple choice, matching, T/F, fill-ins), worth 100 points each. The score for each test will be posted on Blackboard the same day of the test. You are responsible for checking your grades regularly and making sure there are no discrepancies. Final grades will be determined by the total point accumulation from all tests as shown below. There will be no plus/minus grading for the final grade.

A = 360 to 400 points  
B = 320 to 359 points  
C = 280 to 319 points  
D = 240 to 279 points  
F = below 240

Attendance is strongly encouraged. Although attendance will not figure mathematically into your grade, it will be important to your success in this course.

**Policy on Scholastic Dishonesty:**  
Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. For further information please visit the Student Judicial Services Web site: [http://deanofstudents.utexas.edu/sjs](http://deanofstudents.utexas.edu/sjs)

**Special Needs:**  
Students with special needs associated with learning or physical disabilities should discuss accommodations with the instructor. Before course accommodations can be made, you may be required to contact Services for Students with Disabilities (SSD) at (512) 471-6259 (voice) or 1-866-329-3986 (video phone).