Cognitive and Linguistic Sciences 148: Language and the Brain
Sem. I, 2005-06

All course readings will be available on WEBCT as will other course materials. There is no text.

Go to https://webct.brown.edu to log in.
Your short ID is a field in the EAB; if you don’t know it, search your name: http://www.brown.edu/cgi-local/webph
Your password is your SIS #

Check the calendar on WEBCT for scheduling of topics, readings, and class lectures during the semester.

Topics:
I. Introduction to cognitive neuroscience
II. The aphasia syndromes: Clinical considerations
III. Language processing: Evidence from aphasia, neuroimaging and electrophysiology
   A. Methodological considerations
   B. Theoretical considerations
      modularity
      resource allocation
      neural networks
   C. The lexicon - words and meaning
   D. Sound structure
   E. Sentence processing
   F. Other perspectives
      aphasias in the deaf
IV. Role of the right hemisphere in language processing
   A. patients with damage to the right hemisphere
   B. split-brain patients
   C. Neuroimaging
V. Other issues
   A. Brain organization in aging
   B. Recovery of language
   C. Genetics and language

Course Requirements
Take-home mid-term: due Friday, October 21 in class
Paper topic: due by November 7; one-two page submission of paper topic and preliminary readings
Research paper (15-20 pages): due Monday, Dec. 5
Final exam: Monday, December 12 @ 9 AM

Instructor: Sheila E. Blumstein
Metcalf Research, 190 Thayer Street, Rm. 222, ext. 32849; 245-2114 (home)
Office hours: Wed. 2-4 and by appointment
Syllabus

I. Introduction to cognitive neuroscience

II. The aphasia syndromes: Clinical considerations

   **Readings**

III. Language processing: Evidence from aphasia, neuroimaging and electrophysiology

   **A. Methodological considerations**
   - Lesion studies
   - Brain Imaging
   - Electrophysiology

   **Readings**

   **B. Theoretical considerations**
   - Modularity
   - Resource allocation
   - Neural networks

   **C. The lexicon - words and meaning**

   **Readings**


D. Sound structure

**Readings**


E. Sentence processing

**Readings**


F. Other perspectives  
aphasia in the deaf  

IV. Role of the right hemisphere in language processing  
A. patients with damage to the right hemisphere  
B. split-brain patients  
C. neuroimaging  

Readings  

V. Other issues  
A. Brain organization in aging  
B. Recovery of language  
C. Genetics and language  

Readings  