Cognitive and Linguistic Sciences 148: Language and the Brain  
Sem. I, 2007-08

All other course readings will be available on WEBCT  

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

Course Requirements  
Take-home mid-term: due Monday, October 22 in class  
Paper topic: due by Friday, November 9; paper topic and preliminary readings (2 pages)  
Research paper (15-20 pages): due Monday, Dec. 10 (first day of reading period)  
Final exam: Thursday, December 20 @ 2 PM

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

Readings

Text: Ahlsén, ch.1, pp. 3-8; ch. 2, pp. 9-34; ch. 3, pp. 35-50.


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

Readings


C. The lexicon - words and meaning

**Readings**

**Text:** Ahlsén, ch. 6, pp. 79-96.

D. Sound structure

**Readings**

**Text:** Ahlsén, ch. 4, pp. 55-65.

E. Sentence processing

**Readings**

**Text:** Ahlsén, ch. 5, pp. 67-77.

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

