Psychology 751-301 S/T Cognitive
Topics in the Psychology of Human Attention
Spring Semester, 2000
Instructor: Saul Sternberg
(C-17 Solomon Laboratories (Psychology Lab. Bldg.); 215-898-7162; saul@psych.upenn.edu)

Syllabus

Readings: We will read most of the chapters in Pashler (Ed.) (the "Principal Book" below). Readings marked "S" will be read by all participants. Those marked "A" will each be assigned to one or two participants for critical review. Others are also encouraged to read them, of course! Except for the chapters in Pashler (Ed.), copies of all readings marked "S" and "A" will be distributed to all participants. The photocopying work may be shared among participants. Readings listed under "Week n" should be prepared for the meeting during that week; the date of that meeting is indicated.

Meetings: After the initial organizing meeting, the seminar will meet once per week for two hours; there will be 14 meetings in all. After the first, these will occur on Thursdays, at 10:00 am, in Room A-1 of the Solomon Laboratories.

Email alias: attention@psych.upenn.edu (within Penn: attention@psych)
Email to this address will go to all participants (see page 4).

Principal Book:

Other books from which more than one chapter will be drawn:

Comments/Questions on Readings: Due by 2 pm on Wednesday (not 5 pm)

Week 1. (Meet 1/18.) Organizational Meeting
Week 2. (Meet 1/27.) Introduction to Attention; and, for those who need it, Introduction to Signal-Detection Theory

Week 3. (Meet 2/03.) Visual Search; Multiple Information Sources; Set-Size Effects: Part 1.
**Week 4.** (Meet 2/10.) Visual Search; Multiple Information Sources; Set-Size Effects: Part 2.

**S:** Palmer, J. (1995) Attention in visual search: Distinguishing four causes of set-size effects. *Current Directions in Psychological Science, 4,* 118-123.


**S:** Supplement to above: Notes on the two-racers inequality (S. Sternberg)


**Week 5.** (Meet 2/17.) Cued Attention; Spatially Biased Attention


**Week 6.** (Meet 2/24.) Control of Visual Attention


Week 7. (Meet 3/02.) Overlapping Tasks

Week 8. (Meet 3/09.) Attention and Inhibition

Week 9. (Meet 3/23.) Visual Attention and Eye Movements

Week 10. (Meet 3/30.) Neurophysiology of Selective Attention

Week 11. (Meet 4/06.) Task Switching

Week 12. (Meet 4/13.) Auditory Attention
Week 13. (Meet 4/20.) **Inattentional blindness versus inattentional amnesia**


Week 14. (Meet 4/27.) **Quantitative and Computational Models**


**Other Useful Reviews**


**A few of the topics not explicitly included** (Please suggest others so we know better what we’re missing!)

Role of attention in feature binding.
Attention and action.
Attention: location-based, object-based, or scene-based.
Attention and automaticity.
Cross-modal links in attention.

**Participants:** (Initials [??] marking assigned readings indicate who will provide the critical review.)

Graduate Students:
- [KA] R. Kirkland Ahern (Kirkland) [Annenberg]
  - Pavan K. Auluck [Neuroscience]
- [EE] Eric M. Eisenstein [Marketing]
- [EG] Elizabeth Gelfand (Liz) [Marketing]
- [NJ] Narayan Janakiraman [Marketing]
- [JS] Jesse Snedeker [Psychology]

Postdoctoral Fellows:
- [ES] Eric Schumacher [Neurology]
- Wei Yang [Institute for Research in Cognitive Science]

Faculty:
- Frank Durgin [Psychology, Swarthmore]
- Wes Hutchinson [Marketing]
- [JN] Jacob Nachmias (Jack) [Psychology]
- [VR] Virginia Richards (Ginny) [Psychology]
- Saul Sternberg [Psychology]