

Syllabus: PSYC 701-C01
Summer, 2006
James F. Sanford

Date	Topic	Assignment
Jul 5	Introduction: history, associative and cognitive approaches	A: Ch.1 & 2 (p. 34-54)
Jul 7	Cognitive neuroscience; neural networks	A: Ch.2 (p. 54-73); Ch.3 (101-105) B&A
Jul 10	Perception and pattern recognition	A: Ch.3
Jul 12	Attention; short-term memory	A: Ch.4, 5 (p.163-190); R#1
Jul 14	Working memory; Episodic long-term memory	A: Ch.5 (p.190-209); R#2, Ch. 6 (p. 210-248), R#3
Jul 17	Episodic LTM (cont.); semantic LTM; implicit memory	A: Ch.6 (p. 248-257), 7 (except p. 282-287); R #4, 5
Jul 19	Midterm exam	
	Last date for paper topic approval for students not taking an incomplete.	
Jul 21	Concepts/categories; LTM interactions	A: Ch.7 (p. 282-287; R#6 Ch.8 (p. 308-321; 334-341)
Jul 24	Everyday memory; autobiographical memory; memory wrap-up	A: Ch.8 (p. 341-361); R#7-10
Jul 26	Language	A: Ch. 9, 8 (p. 322-334)
Jul 31	Comprehension; reading and writing	A: Ch. 10; R#11; T&S
	Last date for paper draft review for students not taking an incomplete.	
Aug 2	Decision making; problem solving	A: Ch. 11; R#12; Ch. 12
	Paper due for students not taking an incomplete; last date for paper topic approval for students taking incomplete.	
Aug 4	Final Exam	
Aug 28	Last date for paper draft review for students taking an incomplete.	
Sep 1	Paper due for students taking incomplete.	

Reading Assignment key: A: Ashcraft, M. A. (2006). *Cognition* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall. (Required text.)

B&A: Bechtel, W., & Abrahamsen, A. (2002). *Connectionism and the mind: Parallel processing, dynamics, and evolution in networks* (2nd ed.). Malden, MA: Blackwell (p 1-53). (On 2-hour reserve in Johnson Center Library.)

T&S: Thaiss, C., & Sanford, J. F. (2000). *Writing for psychology*. Needham Heights, MA: Allyn & Bacon (p. 23-42). (On 2-hour reserve in Johnson Center Library.)

Readings: (Those with asterisks, readings #7 and 9, are on 2-hour reserve in Johnson Center Library; others are available on-line through the library's e-journal database.)

1. Kareev, Y. (2000). Seven (indeed, plus or minus two) and the detection of correlations. *Psychological Review* 107(2), 397-402.

2. Baddeley, A. (2002). Is working memory still working? *European psychologist*, 7(2), 85-97.

3. Tulving, E. (1985). How many memory systems are there? *American Psychologist*, 40, 385-398.
4. Roberts, W. A. (2002). Are animals stuck in time? *Psychological Bulletin* 128(3), 473-489.
5. Schacter, D. L., (1992). Understanding implicit memory: A cognitive neuroscience approach. *American Psychologist*, 47, 559-569.
6. Bowdle, B. F., & Gentner, D. (2005). The career of metaphor. *Psychological Review*, 112(1), 193-216.
7. Thompson, C. P. (1998). The bounty of everyday memory. In Thompson, C. P., Herrman, D. J., Bruce, D., Read, J. D., Payne, D. G., & Toglia, M. P., *Autobiographical memory: Theoretical and applied perspectives*, p. 29-44. Mahwah, NJ: Erlbaum.*
8. Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54, 579-616 (please read p. 579-599).
9. Larsen, S. F. (1998). What is it like to remember? On phenomenal qualities of memory. In Thompson, C. P. et al., *Autobiographical memory: Theoretical and applied perspectives*, p. 163-190. Mahwah, NJ: Erlbaum.*
10. Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. *American Psychologist*, 54, 182-203.
11. Anderson, J. R. (1996). ACT: A simple theory of complex cognition. *American Psychologist*, 51(4), 355-365.
12. Evans, J. St. B. T. (2002). Logic and human reasoning: An assessment of the deduction paradigm. *Psychological Bulletin* 128(6), 978-996.

Scope and goals of the course: PSYC 701 (Cognitive Bases of Behavior) is an advanced review of current topics, concepts, and theories related to memory and cognition. The focus is generally broad, and the course emphasizes recent advancements in broadly selected areas of memory and cognition. It is expected that students enrolling in 701 will have already completed an undergraduate course in learning, memory, and/or cognition. As a general rule, the readings will be used to complement and update material in the text. Thus, it will generally not be necessary for reading presenters (see below) to review the basics of the reading topics. By completion of PSYC 701, students should understand in some detail many of the processes and structures of cognition, from early attention and pattern recognition to higher-level language and thinking. Memory processes will be emphasized throughout. Students should also be able to make connections between the course content and applications in their chosen areas of psychology.

Exams: There will be two in-class, non-cumulative exams. Exams will be based on assigned chapters, readings, and class discussions. Each will include both short-answer (e.g., identification, short summaries of factual information, etc.) and longer essays that will normally require integration of several course topics. Some choice of integrative essay questions will be available on each exam.

Paper: An 8-12 page paper (exclusive of title page, abstract, references, figures, tables, and appendices) is due by August 2 or September 1 (see below). This paper should present an up-to-date review of theory (or theories), sets of research findings, etc. and discuss a possible **new application of this information in a personal or professional setting. Full credit will not be given for summarizing an already existing application.** I have included a few examples of previous paper topics at the end of this section of the syllabus. Please note that I have to approve your topic by July 19 or August 2. You may e-mail me a short paragraph with the background information and your proposed application, and I will respond. I will be happy to review your paper with you (once only) prior to your submitting it. The last date for draft review is July 31 or August 28. When you are submitting your final draft, please submit a hard copy and a disk with an electronic copy that I will keep if you wish to have a graded hard copy returned to you. If you submit only a single hard

copy, I will keep it in lieu of an electronic copy. I keep copies of many graduate papers for my future reference. Papers should be written in APA style and format. Style/format will be considered when determining grades.

Here are a few tips for writing the paper:

- Divide the paper into several subsections. Ten consecutive pages without a heading make text difficult to follow. Obvious candidates for subheadings include, at a minimum, “research review” and “application.”
- Be sure that your research review supports the application you propose.
- Attend to the “flow” of the paper. Be sure that you include interim summaries, transitional paragraphs, etc., where appropriate.
- Include an abstract written according to APA style and format guidelines. An abstract is required for this assignment.
- Attend to format issues, taking care especially to see that references are cited correctly and that citations in the text match exactly the references in your reference section.
- Be sure to cite only references you actually used. If you read about a primary source study in a secondary source (e.g., you learn of an empirical study in a review article and you do not read the original study), be sure your text describes this accurately and the reference section includes only the secondary source.
- Use quotations sparingly if at all.
- Take advantage of the opportunity for draft review. For draft review, please make an appointment to see me and bring your paper with you to the meeting. I will review it with you in real time. Please do not submit a copy for me to read ahead of time. Draft review works better face-to-face.

A few examples of topics that previous students have used include (a) improving preschoolers’ vocabulary acquisition by having them repeat new words aloud, (b) using subjective organization in teaching bridge, (c) implicit cognitions and performance ratings in organizations, (d) cognitive guidelines to improve memorization of music, and (e) “how to make a horror movie more horrifying.”

Reading assignments: A student will be responsible for leading a class discussion of each of the assigned readings except #7 (the book chapter by Thompson). I will discuss the Thompson chapter as part of the introduction to everyday memory and cognition. The responsible student should prepare an overhead or two or a handout to help structure the discussion. Please note that this assignment requires that all students read the article/chapter ahead of time and be prepared to discuss it during the assigned class. The presenter should NOT spend much time summarizing the factual aspects of the article. As a rule of thumb, each discussion should take about 15-20 minutes, possibly a little longer for long readings and shorter for short ones. Please note also that reading dates may change as the semester progresses and that a few additional readings may be assigned later. A sign-up sheet for presentations will be available at the second class period.

To facilitate class discussion, non-presenting students will be responsible for e-mailing the presenter at least 24 hours prior to the date and time of the assigned discussion. The e-mail should suggest a question or comment about the assignment that would be an interesting point for discussion. The presenter, of course, does not have to address each of the questions or comments, but the information from non-presenters can form the basis for some of the discussion of each article. Each student is expected to e-mail presenters at least nine (9) times during the semester. Please copy questions and comments to me so I can record credit for you, and save your e-mails in case your record and mine do not agree.

Special summer dates: The schedule above includes two dates for paper topic approval, optional draft review, and paper submission. This is to allow those of you who wish to defer development of a paper topic and completion of the paper until we have covered most of the class material to do so. One problem with a short semester is that it may fail to allow sufficient time to research and write a paper between the starting date and ending date of the course. Therefore, you have the option of writing and submitting your paper during the summer semester or deferring these tasks until later in August. If you choose the former option, you will receive a final course (letter) grade in early August. If you choose the latter, you will receive a temporary grade of incomplete (IN) until I grade your paper early during fall semester. Please note that an IN grade counts as a temporary F toward computation of your grade point average until it is changed to a letter grade.

Two other special dates: The last date to drop this class is July 8. The last date to drop without tuition liability is July 6.

Grades: Grades will be based on exam scores (30% each), applications paper (30%), presentation (5%), and participation (5%). Participation implies attendance, active involvement in class discussions, and e-mailing class presenters with questions and comments. In case of borderline grades, consistency and direction of change may be taken into account. Letter grades that I may assign include A+ (98% or higher), A (92-97%), A- (90-91%), B+ (88-89%), B (80-87%), C (70-79%), and F (<70%). I do not normally award grades of B- in graduate classes because of the perceived inconsistency between a satisfactory grade and an unsatisfactory GPA point total associated with it.

Office hours et al.:

Office hours: 6:15-6:50 on days the class meets

Office telephone: (703) 993-1351

Office location: 2046 David King Hall

E-mail address: jsanford@gmu.edu or Jsan52@aol.com. Please use the GMU address for your correspondence, as I check that address frequently and have GMU e-mail forwarded to my AOL account.

For communication that does not require real-time dialogue, please use e-mail. I will check e-mail most weekdays during the semester.

GMU e-mail account: For your protection and privacy, GMU requires that my contact with you regarding your records or any other personal information be completed through your GMU e-mail account rather than an off-campus server. In addition, most of my out-of-classroom correspondence with you will be via e-mail, and I have access to your GMU addresses but not your commercial ones. Therefore, it is important that you either use the GMU address or forward your e-mail to your preferred account. Also, be sure to delete accumulated messages frequently so that you continue to receive class e-mails.

Disability statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at (703) 993-2474. All academic accommodations must be arranged with that office.

Honor Code: All provisions of the GMU Honor Code will be followed in this class. When taking in-class exams, no books, notes, or student interaction will be allowed. Except for suggestions from draft review, each applications paper must be solely the product of the student who submits it. Assistance from others in identifying and locating references, proper formatting, etc., are allowed. However, text organization, wording, etc. must be done by the student submitting the paper. If quotations are used, they must be properly attributed.