

## **Human Memory**

### PSYC 430

#### **Course Description:**

This course provides an overview of classic and current issues in the study of human memory. We will examine the findings from laboratory research to gain a better understanding of the structure and organization of memory. Topics will include working memory, encoding and retrieval processes, implicit memory and multiple memory systems, reconstructive processes in memory, eyewitness memory, developmental changes in memory, neuropsychological correlates of memory and memory disorders, source memory, memory improvement, and the repressed/recovered memory controversy. As a bonus, by the end of the semester, you should be able to watch the movie Memento and tell me what's right and what's wrong with its depiction of amnesia.

#### **Course Text:**

Baddeley, Eysenck, & Anderson (2009). Memory. Psychology Press.

This book is required for this course. If the book store runs out let me know immediately. Also, we will read a number of research articles and book chapters. These readings will be on the course website or on reserve at the library.

#### **Course Website:**

The course website is accessible through: <https://sakai.unc.edu/>. The website will include a variety of course-related materials, including this syllabus, course readings, question sets, and course outlines.

#### **Reading Assignments and Classes:**

A list of reading assignments for the semester is included in the schedule. Additional readings will be announced ahead of time in class. You should read assignments prior to each class meeting. This is crucial. You will be in a much better position to understand the lecture if you have done the reading. It will also increase your ability to take effective notes. The lectures may cover material that was not in the reading, and likewise, there may be material in the reading that is not covered in lecture. You are responsible for all the material in the assigned reading and lectures. You are encouraged to ask questions about any material from the readings or lectures, either in or out of class. Classes will consist of lecture, class demonstrations, small discussion groups and class discussion.

#### **Attendance:**

Attendance is not mandatory, but neither is passing. Attendance is the responsibility of the student. If you find it necessary to miss class, you do not need to inform me. However, each student is responsible for all material presented in class. This includes announcements of exam

dates, announcements of additional readings, announcement of schedule changes, etc. Please arrange to obtain notes from a classmate if you are absent.

### **Evaluation:**

The major requirements for the class are listed below:

(1) Exams

Exams I and II (23 % each)  
Final exam (48 %)

Listed on the schedule are the dates for the exams and final exams. Exams will cover material from class and readings. The exams will consist of short answer/essay questions, identifications and, possibly, some multiple-choice questions. The final exam is comprehensive but will be more heavily weighted towards material from the last third of the semester. Exam dates are listed below. An unexcused absence from an exam results in a grade of 0. For an absence to be excused, you must contact me prior to the missed exam.

(2) Homework Assignments: (6 %):

Accompanying most of the journal articles will be a short homework assignment consisting of a few questions about the article. These questions are designed to help you focus on the main points of each article and to help you assess your understanding of the article. You should type up and hand in your answers (each assignment can be adequately answered in 1 or 2 typed pages). In addition, many of the exam questions will be based on the homework questions, so preparing the homeworks will be effective study for the exams.

### **Final Grade:**

Your final score will be computed as follows:

$$\text{Final score} = [(.23 * \text{Exam I}) + (.23 * \text{Exam II}) + (.48 * \text{Final exam}) + (.06 * \text{Homework grade})] * 100\%$$

Your score will be converted into a letter grade as follows (plusses and minuses will be used at the extremes of each grade range):

<u>Final Score</u>	<u>Final Grade</u>
90% or above	A range
80% - 89%	B range
70% - 79%	C range
60% - 69%	D range
below 60%	F

Finally, a note on cheating and plagiarism. Don't. If caught, you'll get an 'F' in this course and I will refer you to the student judicial office for appropriate disciplinary action.

**Tentative Schedule of classes and readings:** (subject to change with notice)

- Week 1:      **Introduction and History**  
                  Chapter 1
- Week 2:      **Introduction and History**  
                  **Short-term Memory and the Modal Model of Memory**  
                  Chapter 1  
                  Chapter 2
- Week 3:      **Short-term Memory and the Modal Model of Memory**  
                  **Working Memory**  
                  Atkinson, R.C., & Shiffrin, R. M. (August 1971). The control of short-term  
                  memory. Scientific American, 82-90  
                  Chapter 3
- Week 4:      **Working Memory**  
                  **Learning**  
                  Logie, R.H. (1996). The seven ages of working memory. In Richardson, J.T.E.,  
                  Engle, R.W., Hasher, L., Logie, R.H., Stoltzfus, E.R., & Zacks, R.T.  
                  (Eds.) Working memory and human cognition. New York: Oxford  
                  University Press.  
                  Chapter 4 (pp. 69 – 76)
- Week 5:      **Organizing and remembering**  
                  Chapter 5
- Week 6:      **Organizing and remembering**  
                   Craik, F.I.M., & Lockhart, R.S. (1972). Levels of processing: A framework  
                  for memory research. Journal of Verbal Learning and Verbal  
                  Behavior, 11, 671-684.
- Week 7:      **Forgetting**  
                  **Storing Knowledge**  
                  EXAM I - Wed. Feb. 19  
                  Chapter 9  
                  Bahrick, H.P., Bahrick, P.O., & Wittlinger, R.P. (1975). Fifty years of memory  
                  for names and faces: A cross-sectional approach. Journal of Experimental  
                  Psychology: General, 104, 54-75.  
                  Chapter 6
- Week 8:      **Storing Knowledge**  
                  Chapter 6

- Week 9: **Retrieval**  
Alba, J. W. & Hasher, L. (1983). Is memory schematic? Psychological Bulletin, 93, 203-231.  
Tulving, E., & Thompson, D. M. (1973). Encoding specificity and retrieval processes in episodic memory. Psychological Review, 80, 352-373.
- Week 10: **Spring Break**  
NO CLASS: 3/10 – 3/14
- Week 11: **Implicit Memory**  
Chapter 4 (pp. 89 - 94)  
Schacter, D. L. (1987). Implicit memory: History and current status. Journal of Experimental Psychology: Learning, Memory and Cognition, 13, 501-518.  
Mulligan, N. W. (2003). Memory: Implicit versus explicit. In L. Nadel (Ed.), Encyclopedia of Cognitive Science. London: Nature Publishing Group/MacMillan.
- Week 12: **Eyewitness Memory**  
Chapter 14  
Loftus, E. (1992). When a lie becomes memory's truth: Memory distortion after exposure to misinformation. Current Directions in Psychological Science, 1, 121-123.  
Christianson, S. (1992). Emotional stress and eyewitness memory: A critical review. Psychological Bulletin, 112, 284-309.
- Week 13: **Repressed Memories / Recovered Memory Debate**  
**Source Memory**  
EXAM II - Wed. April 2  
Chapter 10  
Loftus, E. (1997). Creating False Memories. Scientific American, 277, 70-75.  
Mitchell, K. J., & Johnson, M. K. (2000). Source monitoring: Attributing mental experiences. In F. I. M. Craik & E. Tulving (Eds.), Oxford Handbook of Memory (pp. 179 - 196). Oxford: Oxford University.
- Week 14: **Memory and the Brain**  
Chapter 11  
Schacter, D. L., Wagner, A. D., & Buckner, R. L. (2000). Memory systems of 1999. In E. Tulving & F. I. M. Craik (Eds.), The Oxford handbook on memory. New York: Oxford University Press.
- Week 15: **Memory and Aging**  
**Emotion and Memory**  
Chapter 13  
Buchanan, T. (2007). Retrieval of emotional memories. Psychological Bulletin, 133, 761-779.  
Chapter 12

Week 16: **Memory Improvement**

**Recent Issues**

Chapter 16

McDaniel et al. (2002). "Brain-specific Nutrients: A Memory Cure?"  
Psychological Science in the Public Interest, 3, 12-38.

FINAL EXAM

Thursday, May 1 - 12:00  
301 Davie