



University of Waterloo
Department of Psychology
Waterloo, ON N2L 3G1

Psychology 398 Research in Memory Winter, 2008

Instructor: Evan F. Risko **E-mail:** efrisko@watarts.uwaterloo.ca
Office: PAS 4211 **Office Hours:** 2:30- 4:30, Mon (or by appointment)
Class Location: PAS 4288 **Time:** 12:30-2:30, Mon. & Wed.

General Goals

The goal of the course is to introduce students to the theoretical and practical aspects of memory research. The course will follow a “learning by doing” philosophy where students are encouraged to engage the material in a “hands on” fashion. Lectures will focus on popular topics in memory research. Class activities are designed to allow students first hand experience with the topics discussed in lectures.

Course Content/Readings

We will sample research from a number of different areas. Readings for the course will consist of primary source material (i.e., journal articles). On average there will be approximately 15 pages of required reading a week. You may be tested on material from required readings that is not discussed in class. All readings are available on UW-ACE. There is no textbook for this course.

Requirements and Grading Scheme

Community Alzheimer’s Program/Class Participation (10%) You will be placed in the Community Alzheimer’s Program at the Sunnyside Home for 7 hours where you will help with daily activities. There is additional information about the Community Alzheimer’s Program on UW-ACE. The class also consists of a number of in class activities that require your participation (e.g., poster sessions at the end of term). If you complete your requisite time in the Community Alzheimer’s Program and participate in class activities you will receive full marks on this course component.

NSERC Research Proposal (10%) You will be required to complete a one-page research proposal. Research proposals will follow the guidelines set out by the Natural Science and Engineering Research Council. There are additional instructions on writing research proposals and an example on UW-ACE.

Broadbent Attention Model (10%) You will be required to build an operational model of selective attention as envisioned by Broadbent (1957) and present this model to the instructor. This assignment can be completed individually or in a group of up to 4. You will be given one entire class period to work on the model. There are additional instructions about this assignment on UW-ACE.

Oral Component (20%) The oral component of the course will consist of the presentation of a research paper in the form of a poster. Students will present their posters in one of four poster sessions that will take place Mar. 24th to April 2nd. There are additional instructions on the format of posters and some examples on UW-ACE.

Tests (50%) There will be two tests (FEBRUARY 13th and MARCH 19th) each worth 25%. Tests will consist of short answer and multiple choice questions. You will be tested on in class material and required readings.

Computer Stuff

Course materials will be available on UW-ACE. If there is a discrepancy between the hard copy outline and the outline posted on UW-ACE, the outline on UW-ACE will be deemed the official version. All work to be handed in will be submitted through UW-ACE.

Note for students with disabilities:

The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Message from the Faculty of Arts Council

All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offense, to avoid committing academic offenses, and to take responsibility for their academic actions. When the commission of an offense is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offenses and types of penalties, students are directed to consult the summary of Policy #71 which is supplied in the Undergraduate Calendar (p. 1:10, and on the web at http://www.adm.uwaterloo.ca/infoucal/UW/policy_71.html). If you need help in learning how to avoid offenses such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your course instructor for guidance. Other resources regarding the discipline policy are your academic advisor and the Undergraduate Associate Dean.

In addition, I would like to direct your attention to the following link to the Arts Faculty Web page, "How to Avoid Plagiarism and Other Written Offences: A Guide for Students and Instructors" (<http://watarts.uwaterloo.ca/~sager/plagiarism.html>)

Schedule and Required Readings

Week 1 January 7th and 9th ALZHEIMER'S DISEASE

McEvoy, A. (2007). Dying in Pieces. *American Journal of Alzheimer's Disease & Other Dementias*, 22, 11-13.

Fuyono, I. (2007). Brain Craze. *Nature*, 447, 18-20.

Eldrige, L. L., Masterman, D., & Knowlton, B. J. (2002). Intact Implicit Habit Learning in Alzheimer's Disease. *Behavioral Neuroscience*, 116, 722-726.

Week 2 January 14th and 16th SELECTIVE ATTENTION and MEMORY

Broadbent, D. E. (1957). A mechanical model for human attention and immediate memory. *Psychological Review*, 64, 205 – 214.

Cowan, N., Lichten, W., & Grove, T. (1988). Memory for unattended speech during silent reading. In M.M. Gruneberg, P.E. Morris & R.N. Sykes (eds), *Practical Aspects of Memory*. London: Academic Press.

Week 3 January 21st and 23rd DIVIDED ATTENTION and MEMORY

Craik, F. I M., Govoni, R., Naveh-Benjamin, M., & Ander, N. D. (1996). The effects of divided attention on encoding and retrieval processes in human memory. *Journal of Experimental Psychology: General*, 125, 159-180.

Lane, S. M. (2006). Dividing attention during a witnessed event increases eyewitness suggestibility. *Applied Cognitive Psychology*, 20, 199-212.

JANUARY. 23rd BROADBENT MODEL DEMONSTRATIONS

Week 3 January 28th and 30th MEMORY FOR EVERYDAY OBJECTS

Nickerson, R. S., & Adams, M. J. (1979). Long-term memory for a common object. *Cognitive Psychology*, 11, 287-307.

Marmie, W. R., & Healy, A. (2004). Memory for common objects: Brief intentional study is sufficient to overcome poor recall of US coin features. *Applied Cognitive Psychology*, 18, 445-453.

Week 4 February 4th and 6th PROSPECTIVE MEMORY

Einstein, G. O. & McDaniel, M. A. (1990). Normal aging and prospective memory. *Journal of Experimental Psychology: Human Perception and Performance*, 16, 717-726.

Rendell, P. G., & Craik, F.M.I. (2000). Virtual week and actual week: Age related differences in prospective memory. *Applied Cognitive Psychology*, 14, 43-62.

FEBRUARY 6th POSTER ARTICLE CHOICE DUE

Week 5 February 11th and 13th

FEBRUARY 11th TEST 1 REVIEW

FEBRUARY 13th TEST 1

Week 6 February 18th and 20th

READING WEEK

Week 7 February 25th and 27th AUTOBIOGRAPHICAL MEMORY

Sheen, M., Kemp, S., & Rubin, D. (2001). Twins dispute memory ownership: A new false memory phenomenon. *Memory & Cognition*, 29, 779-788.

Brown, R. & Kulik, J. (1977). Flashbulb memories. *Cognition*, 5, 73-99.

Week 8 March 3rd and 5th REMEMBERING PEOPLE

Cohen, G. (1990). Why is it difficult to put names to faces? *British Journal of Psychology*, 81, 287-297.

Shimamura, A. P., & Squire, L. R. (1987). A neuropsychological study of fact memory and source amnesia. *Journal of Experimental Psychology: Learning, Memory & Cognition*, 13, 464-473.

MARCH 5th GUEST LECTURE & NSERC RESEARCH PROPOSAL DUE

Week 9 March 10th and 12th FORGETTING

Wixted, J. T. (2005). A theory about why we forget what we once knew. *Current Directions in Psychological Science*, 14, 6-9.

Parker E. S., Birnbaum I. M., Weingartner H., Hartley J. T., Stillman R. C., & Wyatt R. J. (1980). Retrograde enhancement of human memory with alcohol. *Psychopharmacology* 69, 219 – 222.

MARCH 12th POSTER DUE

Week 10 March 17th and 19th

TEST REVIEW

TEST 2 MARCH 19th

Week 11 March 24th and 26th

POSTER SESSION I

POSTER SESSION II

Week 12 March 31st and April 2nd

POSTER SESSION III

POSTER SESSION IIII

Week 13 April 7th

JUST IN CASE DAY