

**PSYCH 398: Research Methods in Memory  
Winter 2010**

**Time:** M, W 12:30 – 2:20  
**Room:** PAS 4228  
**Course Website:** UW-ACE

**Instructor:** Dr. Erin Skinner  
**Office:** PAS 4214  
**Office hours:** W 2:30-3:30, and by appointment.  
**e-mail:** [eiskinne@uwaterloo.ca](mailto:eiskinne@uwaterloo.ca)

**Teaching Assistant:** Shahnaz Koji  
**e-mail:** [skoji@uwaterloo.ca](mailto:skoji@uwaterloo.ca)

**Office:** PAS 4267  
**Office Hours:** F 11-12

**Required Text:**

Radvansky, G. (2006). *Human memory*. Boston: Pearson/Allyn & Bacon.

**Course Description:** Several major themes in human memory will be explored. Historically influential ideas, methods of memory research, current theories and debates, and the application of cognitive, social, and neuropsychological approaches to memory are reviewed and discussed. Emphasis will be placed on methods and theories.

The major goals of this course are to introduce you to research in memory, improve your ability to interpret, criticize, and design research in memory, and to develop your technical writing and oral presentation skills.

**Contact:** It is best to contact me through email at [eiskinne@uwaterloo.ca](mailto:eiskinne@uwaterloo.ca), or visit me during my office hours. **Please label all emails with PSYCH 398 in the subject heading.** If you can't make the scheduled office hours, I am happy to arrange an alternative meeting time in person or via email.

**Course Website:** All lecture slides are downloadable from UW-ACE. If you have problems accessing UW-ACE please email your TA Shahnaz.

It is your responsibility to check e-mail regularly for important and time sensitive messages. You should use your UW account for all e-mail correspondence to UW personnel for reasons such as identification, reliability, and security. Note that higher priority may be given to e-mail received from UW accounts versus other accounts such as hotmail, yahoo, etc. See "Official Student Email Address" for further details: <http://www.adm.uwaterloo.ca/infocist/emailuse.html>

**Course Evaluation:** There are 5 components to the grading in the course

|                               |                 |
|-------------------------------|-----------------|
| Midterm #1                    | 25%             |
| Midterm #2                    | 25%             |
| Lab worksheets and activities | 9x3% each = 27% |
| Poster Presentation           | 15%             |
| Participation in Class        | 8%              |

**Details on each Evaluation**

1. **Midterm Tests:** Each test is non-cumulative and is 1 hour and 40 minutes (100 minutes) in length. The test will be based on the material presented in the text and the lectures. The test will be written either in the regular classroom (PAS 4228) or in rooms to be determined to ensure adequate space for writing (information on test location will be posted on UWACE and provided during lectures). I will give you more details on what to expect for the test closer to the date.

*Date of Test #1: Monday February 1<sup>st</sup>* (in class), worth 25%

*Date of Test #2: Monday March 15<sup>th</sup>* (in class), worth 25%

2. **Lab Worksheet and Activities:** The goal of the lab component is to introduce you to E-Prime software, which is often used to collect data for research studies. All lab activities and worksheets are to be completed during the scheduled lab time, and are worth 3% each (9 labs X 3% = **27% of your grade**). A copy of the “Lab Course notes” is available at the UW Bookstore. **NOTE that all labs take place on the dates indicated in the syllabus (in bold), in PAS 1237.**
3. **Poster Presentation:** You will create a poster for a study that you have developed. A poster is 1-page summary of the Background, Methods, Results, and Conclusions from a given study. This is the format used to communicate research findings at scientific conferences and meetings. A poster serves as an “Executive Summary” of a study, allowing others to quickly understand the research question and answers that were investigated. A sample poster, in Power Point format, can be found on UW-ACE. You can use this sample as a template for your own poster.

The idea is to develop an idea for a research experiment, develop sound research methodology, and predict the results and conclusions. For the *background section*, you will want to explain the rationale of your experiment. It should contain what the question is, the rationale for the study, and the hypotheses of the experiment you are proposing. For the *methods section*, you will want to provide the basic details of the methods you will use to test your question. You do not need to give precise numbers (of participants, stimulus duration, etc.), but if you choose to do so, simply base them on previous works. For the *results section*, you should state expected means. You should have at least one table or graph that indicates the primary measure of your experiment and what you expect the results will be. For the *conclusions section* you should indicate what the implications of the findings are for the field.

The research experiment you develop for your poster presentation can be on any topic on human memory. I will also provide you with a list of topics. You are welcome to choose from this list of topics or to create your own idea. If you want to go with your own idea, it is a good idea to send an email or visit me or your TA during our office hours to go over the proposed topic.

Please print 25 copies of your poster on plain white sheets of paper (8 ½ X 11) for distribution to the whole class. You will be given 8 minutes to tell the class about your chosen study, and the class will be given 2 minutes for questions. Be sure to acknowledge

all sources of information, and avoid plagiarism (see note below). You will be marked on the written clarity of the content of your poster, question/methodology/predictions, and your ability to communicate the poster to the class.

*Poster Presentation Dates: March 22, 29, & April 5*

4. **Participation:** My hope is that you will play an active role in this course. That doesn't mean simply attending class; at this level of your education, you should be critically thinking about the material and analyzing it to further your educational process. A part of that process is asking questions and making comments on the material that interests you. Different people have different learning styles. If you feel that your learning style may hurt your chances at getting participation marks (for example, you prefer quiet contemplation) let me know and we will work something out (for example, one-on-one conversation or thought papers).

### **The Official Version of the Course Outline**

If there is a discrepancy between the hard copy outline (*i.e., if students were provided with a hard copy at the first class*) and the outline posted on ACE, the outline on ACE will be deemed the official version. Outlines on ACE may change as instructors develop a course, but they become final as of the first class meeting for the term.

### **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.

### **Concerns About the Course or Instructor (Informal Stage)**

We in the Psychology Department take great pride in the high quality of our program and our instructors. Though infrequent, we know that students occasionally find themselves in situations of conflict with their instructors over course policies or grade assessments. If such a conflict arises, the Associate Chair for Undergraduate Affairs (Dr. Colin Ellard) is available for consultation and to mediate a resolution between the student and instructor. Dr. Ellard's contact information is as follows:

Email: [cellard@uwaterloo.ca](mailto:cellard@uwaterloo.ca)  
Ph 519-888- 4567 ext 36852

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 and 71 below for further details.

## **Academic Integrity, Academic Offenses, Grievance, and Appeals**

To protect course integrity, as well as to provide appropriate guidance to students, course outlines in the Faculty of Arts must include the following note on avoidance of academic offenses:

**Academic Integrity:** In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check <http://www.uwaterloo.ca/academicintegrity/> for more information.]

**Discipline:** A student is expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about 'rules' for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under [Policy 71](#) - Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71](#) - Student Discipline, <http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>  
For typical penalties check Guidelines for the Assessment of Penalties <http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm>

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70](#) - Student Petitions and Grievances, Section 4, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>  
When in doubt please be certain to contact the department's administrative assistant who will provide further assistance.

**Appeals:** A student may appeal the finding and/or penalty in a decision made under [Policy 70](#) - Student Petitions and Grievances (other than regarding a petition) or [Policy 71](#) - Student Discipline if a ground for an appeal can be established. Read [Policy 72](#) - Student Appeals, <http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

Academic Integrity website (Arts):

[http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility.html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html)

Academic Integrity Office (UW): <http://www.uwaterloo.ca/academicintegrity/>

**Academic Integrity website (Arts):**

[http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility.html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html)

**Academic Integrity Office (UW):** <http://uwaterloo.ca/academicintegrity/>

### Course Schedule

| Date             | Topic   | Readings & Assignments                                      |
|------------------|---|---|
| January 4        | Introduction/A Brief History of Memory                      | Chapter 1   |
| January 6        | Research Methods in Memory                                  | Chapter 3   |
| January 11       | Sensory & Short-Term Memory                                 | Chapter 4   |
| January 13       | <i>Lab 1: Introduction to E-prime</i>                       | Lab 1 Course Notes  |
| January 18       | Working Memory  | Chapter 5   |
| January 20       | <i>Lab 2: Sample Experiment</i>                             | Lab 2 Course Notes  |
| January 25       | Non-declarative Memory & Semantic Memory                    | Chapter 6 (pp. 120-131) & Chapter 9 (pp. 187-192 & 201-208) |
| January 27       | <i>Lab 3: Creating a Free-Recall Experiment</i>             | Lab 3 Course Notes  |
| February 1       | <b>Midterm #1</b>   |   |
| February 3       | Research Methods: Practical Aspects (for poster assignment) |   |
| February 8       | Episodic Memory Part I                                      | Chapter 7   |
| February 10      | <i>Lab 4: Creating A Recognition Experiment</i>             | Lab 4 Course Notes  |
| February 15 & 17 | READING WEEK  |   |
| February 22      | Episodic Memory Part II                                     | Chapter 7   |
| February 24      | <i>Lab 5: Making Modifications to an Experiment</i>         | Lab 5 Course Notes  |
| March 1          | Memory & Reality  | Chapter 12  |
| March 3          | <i>Lab 6: Fixing Errors in a Recall Experiment</i>          | Lab 6 Course Notes  |

|          |   |   |
|----------|---|---|
| March 8  | Amnesia/Aging   | Chapter 16 (pp. 339-350) & Chapter 15 (pp. 328-337) |
| March 10 | <i>Lab 7: Fixing Errors in a Recognition Experiment</i> | Lab 7 Course Notes                                  |
| March 15 | <b>Midterm #2</b>                                       |   |
| March 17 | <i>Lab 8: Run classmates through your experiment</i>    | Lab 8 Course Notes                                  |
| March 22 | <b>Poster Presentations #1</b>                          |   |
| March 24 | <i>Lab #9: E-data aid</i>                               | Lab 9 Course Notes                                  |
| March 29 | <b>Poster Presentations #2</b>                          |   |
| March 31 | <b>Poster Presentations #3</b>                          |   |