

University of Waterloo
Department of Psychology
Psych 207
Cognitive Processes
Winter 2016
Tuesdays and Thursdays 8:30 - 9:50, AL116

Instructor and T.A. Information

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Course Description

The objectives of this course are to introduce you to important concepts, phenomena, experimental techniques, and theoretical issues in the field of cognitive psychology. As cognitive psychology is the study of how people come to know about their world, this course will cover how people attend, encode, represent, and understand that world, as well as solve problems, make decisions, and communicate their thoughts. The course will involve an assessment of current theoretical issues and experimental methodology, and whenever possible, links to real-life situations will be considered. Though we will only have a chance to touch on a few aspects of this vast research domain, the material will hopefully give you new insights into how your mind works. Because of the large number of students in the class, I will spend most of class time lecturing. However, I do encourage discussion and questions to clarify material. I think the class will be much better if you participate by asking, and answering, questions. As well, because cognitive psychology is a science, the course will focus on discussing original experimental research, providing a foundation for other psychology courses such as *Memory* and *Decision Making*. I hope that you enjoy your Introduction to *Cognitive Processes* and go on to enjoy more specialized courses in the area of cognitive psychology.

Course Goals and Learning Outcomes

Upon completion of this course, students should be able to:

- A. Explain how the mind works in basic terms, including
 - how we perceive people, events, and things
 - how we encode and remember information
 - how we mentally organize information
 - how we call on our mental information and resources to make important decisions

- B. Describe how context shapes and constrains cognition, which involves
 - recognizing that cognitive phenomena occur in a context, and this context both fosters and constrains how the cognitive operations are implemented
 - recognizing that universal cognitive mechanisms assumed or generalized from the laboratory do not always translate to every person in every situation

Required Text

Galotti, K, Fernandes, M., Fugelsang, J., & Stolz, J. (2010). *Cognitive psychology: In and out of the laboratory. 1st Canadian edition*. Toronto, ON: Thomson Nelson Publishing.

Information Available on LEARN

The course web page can be found on [LEARN](#). Here, you will find links to the syllabus, to my lecture slides, and to important announcements. I will try my best to have the lecture slides for the upcoming lecture up at least 24 hours in advance of class time.

Course Requirements and Assessment

There will be four non-cumulative tests, each worth 25% of the final grade (see dates below). The tests will be predominately made up of multiple-choice questions and a couple short answer concept questions. All tests will be based on the material presented in the text and in lectures.

Assessment	Date of Evaluation	Weighting
Test #1	January 21 st , 2016	25%
Test #2	February 11 th , 2016	25%
Test #3	March 10 th , 2016	25%
Test #4	March 31 st , 2016	25%
Research Participation		4%
Total		104%

Course Outline

Week	Date	Topic	Readings
1	1/5 1/7	Syllabus, Course Overview History	Chapter 1
2	1/12 1/14	The Brain Perception	Chapter 2 Chapter 3
3	1/19 1/21	Perception - continued Test #1 (Lectures & Chapters 1 - 3)	
4	1/26 1/28	Attention Attention - continued	Chapter 4
5	2/2 2/4	Memory Structures Memory Structures - continued	Chapter 5
6	2/9 2/11	Memory Processes Test #2 (Lectures & Chapters 4 - 6)	Chapter 6
		READING WEEK (No Classes)	
7	2/23 2/25	Concepts and Categorization Concepts and Categorization - continued	Chapter 7
8	3/1 3/3	Visual Imagery Visual Imagery - continued	Chapter 8
9	3/8 3/10	Language Test #3 (Lectures & Chapters 7 - 9)	Chapter 9
10	3/15 3/17	Thinking and Problem Solving Thinking and Problem Solving - continued	Chapter 10
11	3/22 3/24	Decision Making Decision Making - continued	Chapter 11
12	3/29 3/31	Individual Differences and Future Directions Test #4 (Lectures & Chapters 10 - 12)	Chapter 12

Research Experience Marks

Information and Guidelines: Experiential learning is considered an integral part of the undergraduate program in Psychology. Research participation is one example of this, article review is another. A number of undergraduate courses have been expanded to include opportunities for Psychology students to earn grades while gaining research experience.

Since experiential learning is highly valued in the Department of Psychology, students may earn a **"bonus" grade of up to 4%** in this course through research experience. Course work will make up 100% of the final mark and a "bonus" of up to 4% may be earned and will be added to the final grade if/as needed to bring your final grade up to 100%. The two options for earning research experience grades (participation in research and article review) are described below. Students may complete any combination of these options to earn research experience grades.

Option 1: Participation in Psychology Research: Research participation is coordinated by the Research Experiences Group (REG). Psychology students may volunteer as research participants in lab and/or online (web-based) studies conducted by students and faculty in the Department of Psychology. Participation enables students to learn first-hand about psychology research and related concepts. Many students report that participation in research is both an educational and interesting experience. Please be assured that all Psychology studies have undergone prior ethics review and clearance through a University of Waterloo Research Ethics Committee.

Educational focus of participation in research: To maximize the educational benefits of participating in research, students will receive feedback information following their participation in each study detailing the following elements:

- Purpose or objectives of the study
- Dependent and independent variables
- Expected results
- References for at least two related research articles
- Provisions to ensure confidentiality of data
- Contact information of the researcher should the student have further questions about the study
- Contact information for the Director of the Office of Research Ethics should the student wish to learn more about the general ethical issues surrounding research with human participants, or specific questions or concerns about the study in which s/he participated.

Participation in LAB studies is worth 0.5 participation credits (grade percentage points) for each 30-minutes of participation. Participation in ONLINE studies is worth .25 credits for each 15-minutes of participation. Researchers will record student's participation and will advise the course instructor of the total credits earned by each student at the end of the term.

How to participate?

Study scheduling, participation and grade assignment is managed using the SONA online system. All students enrolled in this course have been set up with a SONA account. You must get started early in the term.

[INSTRUCTIONS/DATES/DEADLINES: How to log in to Sona and sign up for studies](#)

*** Please do not ask the Course Instructor or REG Coordinator for information unless you have first thoroughly read the information provided on this website. ***

More information about the REG program is available at: [REG Participants' Homepage](#)

Option 2: Article Review as an alternative to participation in research: *Students are not required to participate in research, and not all students wish to do so. As an alternative, students may opt to gain research experience by writing short reviews (1½ to 2 pages) of research articles (i.e., scientific journal articles) relevant to Cognitive Psychology. You must contact your TA to get approval for the article you have chosen before writing the review.* Each review article counts as one percentage point. To receive credit, you must follow specific guidelines. The article review must:

- **Be submitted before the last lecture. Late submissions will NOT be accepted under ANY circumstances.**
- Be typed
- Fully identify the title, author(s), source and date of the article. A copy of the article must be attached.
- Identify the psychological concepts in the article and indicate the pages in the textbook that are applicable. Critically evaluate the application or treatment of those concepts in the article. If inappropriate or incorrect, identify the error and its implications for the validity of the article. You may find, for example, misleading headings, faulty research procedures, alternative explanations that are ignored, failures to distinguish factual findings from opinions, faulty statements of cause-effect relations, errors in reasoning, etc. Provide examples whenever possible.
- Clearly evaluate the application or treatment of those concepts in the article.
- Keep a copy of your review in the unlikely event we misplace the original.

Accommodations for Illness

Students requesting accommodation for course requirements (assignments, midterm tests, final exams, etc.) due to illness should do the following:

- seek medical treatment as soon as possible and obtain a completed uWaterloo Verification of Illness Form: <https://uwaterloo.ca/health-services/student-medical-clinic/services/verification-illness>
- submit that form to the instructor within 48 hours.
- (preferably) inform the instructor by the due date for the course requirement that you will be unable to meet the deadline and that documentation will be forthcoming.

In the case of a missed assignment deadline or midterm test, the instructor will either:

1. Waive the course component and re-weight remaining term work as he/she deems fit according to circumstances and the goals of the course, or
2. Provide an extension.

In the case of bereavement, the instructor will provide similar accommodations to those for illness. Appropriate documentation to support the request will be required.

Students who are experiencing extenuating circumstances should also inform their academic advisors regarding their personal difficulties.

Accommodation for Students with Disabilities

Note for students with disabilities: The [AccessAbility Services office](#), 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 AS office 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. Richard Eibach) is available for consultation and to mediate a resolution between the student and instructor. Dr. Eibach's contact information is as follows: Email: reibach@uwaterloo.ca, Phone: 519-888-4567, x38790. 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 Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (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](#).

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](#).

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](#).

Other sources of information for students

[Academic integrity](#) (Arts) [Academic Integrity Office](#) (uWaterloo)