

Psychology 2320

Cognition and Perception: Thinking and Seeing

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Spring
(T,Th 10:50 – 12:05)

Objective

The mind is a mysterious thing. In this course we will explore two related mental processes, perception and cognition, in the hopes of finding some insights into how these processes occur in our brains. Roughly one-third of the course will be dedicated to the deceptively simple act of perception. We will cover the various sensory systems (did you know there are more than five !?) and follow the information they provide through successive stages of perception to learn how we become aware of complex percepts such as colorful 3-D scenes and intricate music. The next third of the course will deal with the tight connection between perception, attention and memory. We'll investigate the various limitations of our brains and see how we have evolved mechanisms to deal with these limitations. We'll also consider the different sorts of information that can form memories and the various ways memories can be categorized. Finally, we'll spend some time with some interesting consequences of the way our minds work such as false memories, placebo effects, and subconscious perception.

Textbook

The textbook for the course is a book of readings available at the bookstore. It consists of a series of articles, many of them "classics" of

the discipline, taken from both the professional literature and magazines such as *Scientific American*. This text is similar, but not identical, to those used in previous years. You may be able to use an older version if you happen to have one. Much of the background for these readings will be presented in lectures. In addition, you will be referred occasionally to the textbooks *Sensation and Perception* by Coren, Porac, and Ward and *Cognitive Psychology* by Robinson-Riegler at various points throughout the term. These supplementary texts will be available on reserve in the library and you do *not* need to purchase them. They are there simply for you to use as a reference if you don't understand something discussed in lecture.

Structure of the course

The course will proceed in roughly the order of the readings in the textbook, although we'll skip around a bit. Each reading will typically act as an extension of topics covered in lecture and will prompt you to engage in the material at a deeper level. In no case should the perspective of the authors of the readings necessarily be taken as the "correct" answer on some issue. As with most areas of human endeavour, many of the readings are important or "classics" not because they were or are "right", but because they identified an important area or phenomenon or because they were so thoroughly wrong that they promoted a flurry of research into what the correct approach should be.

Evaluation

Your grade in this course will be based on two midterm exams, a final exam, and a journal project. Each exam will be computer administered via [WebCT](#). The first midterm is weighted less than the other tests so that you can get used to WebCT exams and my style of exam questions – without too much at stake. It will be up to you to go to the appropriate computer lab some time within the allotted period to take the tests. The tests will not be administered during class periods. The tests will contain multiple choice questions, true/false, matching etc. and may contain short answer questions. The dates during which you will be allowed to write the tests will be announced early in the semester.

Midterm 1 is worth 15%
Midterm 2 is worth 30 %
Final is worth 45%

No excuses for missed tests will be accepted other than documented, prolonged illness. Make-up tests will not normally be provided.

If you need special accommodations for exams, contact the disabilities resource centre and also bring them to my attention as soon as possible.

Idea Journal

This course is as much about ideas as it is about facts. As an undergraduate one is often evaluated on the retention of facts and rarely on the generation of ideas. As you go through this course you will encounter many examples of how researchers generate and test ideas and theories about how the mind works. You will also be required to generate ideas and think about how to test them. Throughout the term you will keep an “Idea Journal”. In this journal you will record your thoughts about perception and cognition, especially when you find something mysterious or intriguing. You should also try to think of a way to investigate the idea with an experiment. These journals do not need to be elaborate, nor do they need to be extensive. There is no fixed length. It doesn’t matter how many ideas you have – it only matters how *good* they are.

You will hand in your journals on in class on our last day of the semester and no journals will be accepted late. You will be graded on the cleverness and insightfulness of your ideas. This assignment is worth 10% of your grade.

Your final Letter grade will be calculated as follows. Rounding will be down to the nearest integer (this is how WebCT works) or at the discretion of the instructor. Slight adjustments, normally upward, may be made in certain extraordinary circumstances.

| Percentage | Letter Grade |
|------------|--------------|
| 90-100 | A+ |
| 84-89 | A |
| 80-83 | A- |

| | |
|-------|----|
| 77-79 | B+ |
| 73-76 | B |
| 70-72 | B- |
| 67-69 | C+ |
| 63-66 | C |
| 60-62 | C- |
| 56-59 | D+ |
| 52-55 | D |
| <52 | F |

WebCT Testing

The exams must be written in the WebCT testing centre.

It operates on a **first-come, first-serve** basis. There are a limited number of computers in it, and many different classes use it. It is thus highly recommended that exams be written early, and not left to the last few hours on the last day. Students should familiarize themselves with WebCT function before showing up at the test centre. All students will have access to the course WebCT space, at <http://webct.uleth.ca> . This can be logged onto with U of L email usernames and passwords.

Interacting

Sometimes you won't understand the course material. It is important that you first *try to understand it yourself* and THEN ask questions. The act of trying helps you to learn. If you have a question or need some help you should take these steps IN THIS ORDER:

1. Review the lecture notes.
2. Read and ponder the relevant textbook sections including the books on reserve.
3. Ask me after class.
4. Consult the TA at office hours or review sessions.
5. Make an appointment to meet with me.

Your TAs are Tine Gulbrandsen (tine.gulbrandsen@uleth.ca) and Wahab Hanif (hanif@uleth.ca).

If you have questions or want to discuss aspects of the course, I will be available immediately after every Tuesday (but not Thursday) class to answer questions. For more detailed questions or to spend more time discussing something, I will happily make an appointment to meet with you.

I can be reached by email at matthew.tata@uleth.ca *under certain circumstances*. Here are the rules: 1. no emailing the night before the last day to take a test. 2. Ask yes or no questions. If you ask me a non-yes-or-no question the response will be “no”. This is because the topics of this course are often best explained in person 3. email should be used to make an appointment to meet with me in person – face-to-face meetings work better than email messages. 4. Put “2320” somewhere in the subject line to be sure that I get it.

Welcome to the course.