

PSYC 4260 3.0 Seminar in Sensation and Perception

Course Outline Winter 2014

Time: Tuesdays: 2:30-5:30

Classroom: Sherman Health Science Research Centre room 1015
unless otherwise noted in weekly schedule below

Course Webpage: moodle.yorku.ca

Course Director:

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X66213

Prerequisite: PSYC 1010 6.0 and PSYC 2220 3.0 Sensation and Perception

General Description:

We will conduct a number of group experiments that relate to and demonstrate concepts learned in Sensation and Perception (2220) or other cognitive neuroscience courses. Student will complete experiments where they will acquire and analyze the data and write up a manuscript based on these data using APA style guidelines.

Textbook: *Making Sense in Psychology. A Student's Guide to Research and Writing.* (2012). Margot Nothey and Brian Timney. Oxford University Press.

A copy of a textbook on Sensation and Perception may also be useful but not required.

Evaluation:

Class attendance and participation	10%	
Psychophysics methods computer tutorial	10%	due Jan 28 th
Short experiment write-up	20%	due Feb 25 th
Poster presentation	10%	Mar 25 th or Apr 1 st
Final experiment write-up	50%	due April 12 th

Weekly Schedule:

Jan	7	Introductory meeting
	14	Psychophysical methods computer lab <i>Hebb Lab, 159 BSB</i>
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	28	Class experiment—measuring the blind spot
Feb	4	Class experiment—Emmert’s Law
	11	Class experiment—prism adaptation
	18	Reading Week
	25	working with Excel, programming in SuperLab
Mar	4	small groups experiment
	11	small groups experiment
	18	small groups experiment
	25	Student presentations
Apr	1	Student presentations

Course Goals:

This course is designed to further your skills in experimental design and execution in the area of cognitive neuroscience. Together, we will participate in a number of cognitive neuroscience experiments which address questions about vision, perception and cognitive neuroscience. By conducting these experiments, you will also learn how to analyze data and you will practice presenting your results in the ways commonly used by research scientists—through oral and poster presentations as well as written reports.

This a laboratory course where during many of the class periods you will be required to take part in various data gathering exercises. During these classes you will take measurements on yourself and your classmates that tap underlying cognitive neuroscience processes. Hopefully, you will glean some insight into the steps taken by cognitive neuroscientists when they perform experiments, and that you learn some of the basics of data management and analysis as well as presentation. This is intended to be a skills course rather than a content course, although hopefully you will learn something about perception and cognitive processes along the way.

In order to prepare you for particular labs, it will be necessary for at least some class time to consist of short lectures/discussion in which the necessary background material for the laboratories will be provided. However, this is not intended to be a survey course but rather a practical hands-on methods course. It is really important to be able to communicate effectively in any career path, and particularly so in science in order to share information with others. Thus, it is critical for cognitive neuroscientists, like other scientists, to learn how to effectively communicate their findings through both written and oral means. We will practice both in this course.

Finally, this course is intended to be practical and empower you with basic critical thinking and basic computer skills that will serve you well regardless of your future endeavors. Thus, we will spend time making sure everyone knows how to work with data sets in Microsoft Excel including basic statistical calculations. You will also learn how to present your results visually, by plotting figures. In the final project you will produce a written research paper.

Important Information for Students

The information in the following section has been taken from the Senate Committee on Curriculum & Academic Standards webpage. All students are expected to familiarize themselves with the following information

(available online at http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm)

York's Academic Honesty Policy and Procedures/Academic Integrity Website

York students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty. Students are expected to review the materials on the Academic Integrity website: <http://www.yorku.ca/academicintegrity> I strongly encourage you to complete the Academic Integrity Tutorial http://www.yorku.ca/tutorial/academic_integrity/

Access/Disability

- York provides services for students with disabilities (including physical, medical, learning, and psychiatric) needing accommodation related to teaching and evaluation methods/materials. Students in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided. Information is available at <http://www.yorku.ca/disabilityservices>

Religious Observance Accommodation

- York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict to you, contact the Course Director within the first three weeks of class. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre, or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Student Conduct

- Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available on the York website: <http://www.yorku.ca/univsec/policies/document.php?document=82>

CHEATING/PLAGIARISM

- The University does not look favourably on cheating of any kind – the penalties are harsh indeed. Become familiar with the rules and regulations regarding cheating/plagiarism published in the University Calendar. See the University Calendar for more detail.