

Faculty of Health
Department of Psychology
PSYC 4260
SEMINAR IN SENSATION AND PERCEPTION
Winter 2020

Instructor Information

Instructor: Professor Jennifer Steeves
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Course Prerequisite(s): Course prerequisites are strictly enforced.

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2021 3.00 (Statistical Methods I) or HH/PSYC 2020 6.00 (Statistical Methods I and II)
- HH/PSYC 2030 3.00 (Introduction to Research Methods) or substitutes
- HH/PSYC 2220 3.00 (Sensation and Perception I)
- Students must be in an Honours program in Psychology and have completed at least 84 credits (excluding (EDUC) education courses)

Course website: [Moodle](https://moodle.yorku.ca/) (<https://moodle.yorku.ca/>)

Course 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. Students will complete experiments where they will acquire and analyze the data and write up a manuscript based on these data using APA style guidelines.

Learning Outcomes

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

1. Demonstrate in-depth knowledge in sensation and perception.
2. Critically evaluate, synthesize and resolve conflicting results in sensation and perception.
3. Articulate trends in the psychology of sensation and perception
4. Locate research articles in sensation and perception and show critical thinking about research findings.
5. Express knowledge of sensation and perception in written form.

6. Engage in evidence-based dialogue with course director and peers.
7. Demonstrate an ability to work with others.

Specific Learning Objectives

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 addressing 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.

Required Text

- The textbook is not required but a highly recommended tool for this course and will be useful for other courses requiring research papers.
Publication Manual of the American Psychological Association, 7th Edition (2020).
- A copy of a textbook on Sensation and Perception may also be useful but not required.

Course Requirements and Assessment

Assessment	Date of Evaluation	Weighting
Class attendance and participation	weekly	10%
Class Experiment 1 research report	Jan 30	10%
Class Experiment 2 research report	Feb 13	15%
Class Experiment 3 research report	Feb 27	25%
Poster/powerpoint presentation	Apr 2	10%
Final experiment research report	Apr 13	30%
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Total		100%

Description of Assignments

Research reports must strictly adhere to APA guidelines and will be graded accordingly. Research reports must be submitted in hard copy on the due date during class time. Electronic copies will not be accepted.

Grading as per Senate Policy

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.)

(For a full description of York grading system see the York University Undergraduate Calendar - <http://calendars.students.yorku.ca/2016-2017/academic-and-financial-information/academic-services/grades-and-grading-schemes>)

Late Work/Missed Tests or Exams

Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (Attending Physician Statement (APS) which can be found at: <http://registrar.yorku.ca/pdf/attending-physicians-statement.pdf>) may request accommodation from the Course Instructor. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

APS must be submitted within 48 hours from the missed assignment date. Late assignments will be subjected to a loss of 5% per day. Late assignments must be submitted to the Psychology Department room 101 and be date stamped by the secretary.

Add/Drop Deadlines

For a list of all important dates please refer to: [Important Dates](#)

Important dates

Last date to add a course **without permission** of instructor (also see Financial Deadlines)

Last date to add a course **with permission** of instructor (also see Financial Deadlines)

Last date to drop a course without receiving a grade (also see Financial Deadlines)

Winter (W)

Jan. 19

Feb. 3

March 13

Important dates

Course Withdrawal Period (withdraw from a course and receive a “W” on the transcript – see note below)

Winter (W)

March 14-
Apr. 5

Information on Plagiarism Detection

It is recommended that you pass your papers through TurnItIn to help you avoid plagiarism.

Electronic Device Policy

Laptops may be required for some class assignments.

Attendance Policy

Attendance is mandatory as this is a hands-on course. Attendance will be part of your course grade (see assessment above).

Academic Integrity for Students

York university takes academic integrity very seriously, please visit [an overview of Academic Integrity at York University](#) from the Office of the Vice-President Academic.

The following links will assist you in gaining a better understanding of academic integrity and point you to resources at York that can help you improve your writing and research skills:

- [Information about the Senate Policy on Academic Honesty](#)
- [Online Tutorial on Academic Integrity](#)
- [Information for Students on Text-Matching Software: Turnitin.com](#)
- [Beware! Says who? A pamphlet on how to avoid plagiarism](#)
- [Resources for students to help improve their writing and research skill](#)

Test Banks:

The use of test banks is not permitted in this course and may be considered a potential breach of academic honesty. This includes but is not limited to; buying or selling test banks.

Electronic Devices During a Test/Examination:

Electronic mobile devices of any kind are not allowed during a test or examination. Students are required to turn off and secure any electronic mobile device in their bag which is to be placed under the chair while a test/exam is in progress. Any student observed with an electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of Academic Honesty.

Academic Accommodation for Students with Disabilities:

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The [York University Accessibility Hub](#) is your online stop for accessibility on campus. The [Accessibility Hub](#) provides tools, assistance and resources. Policy Statement

Policy: York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses.

Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

For Further Information please refer to: [York university academic accommodation for students with disabilities policy](#)

Course Schedule:

Jan	9	Introductory and planning meeting
	16	<u>Class experiment 1</u> —measuring the blind spot
	23	Writing up an experiment, working with data in Excel
	30	<u>Class experiment 2</u> —Emmert’s Law (Class Experiment 1 report due)
Feb	6	York MRI Facility tour and lab demo, work on assignment, see moodle for Excel tutorials
	13	<u>Class experiment 3</u> —prism adaptation (Class Experiment 2 report due)
	20	Reading Week—no class
	27	Programming in SuperLab—final experiment (Class Experiment 3 report due)
Mar	5	final experiment—programming
	12	final experiment—programming/ data collection
	19	final experiment—data collection /data analysis
	26	final experiment—data analysis and data presentation
Apr	2	Student poster/powerpoint presentations