Faculty of Health

Department of Psychology

PSYC 4260 6.0 Section A: SEMINAR IN SENSATION AND PERCEPTION

Tuesdays/ 11:30 am - 2:30 pm / Dahdaleh Building 0013 Fall 2024

The course will be delivered synchronously during the scheduled class time. Class time will be spent with short lectures, in addition to discussion, and group-based student activities supervised by the course director. Online activities and assignments are an important component of the course, including participation of each student in online experiments. The focus of the course is the empirical approach to studying sensation and perception, that is, how can we use experiments to build our understanding of how the brain processes information from our sensory organs to produce our rich experience of the world. I have an active research program in visual neuroscience, so clearly this topic is dear to my heart, and I look forward to exploring it with you.

Please note that the ordering of topics on the course schedule is subject to change.

Instructor and T.A. Information

Instructor: Peter J. Kohler, PhD (he, him, his)

Office: Sherman Health Sciences Research Centre, Room 1012

Office Hours: By appointment Email: pjkohler@yorku.ca

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology)
- 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

Course Credit Exclusions

Please refer to York Courses Website for a listing of any course credit exclusions.

Course website: eClass

All course materials will be available on the course eClass site. The site will be your central access point for course materials.

Course Description

We will conduct a number of online experiments that relate to and demonstrate concepts learned in Sensation and Perception (2220) or other cognitive neuroscience courses. Students will conduct exercises and participate in online experiments. They will analyze the data from all students and write assignments to demonstrate their knowledge about the experiments, the current results and the related theory. The final assignment will be based on experiments that the students will design themselves, in groups, and will take the form of a research report following APA guidelines, describing the experiment and results.

Program 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

You will participate in exercises based on classic and current experiments from the literature on sensation and perception. Through the process of collecting data on yourself and analyzing the aggregated results from the entire class you will develop first-hand understanding of how the scientific method can be used to gather evidence and draw conclusions about sensory systems. This is intended to be a skills course rather than a content course, although the hope is that you will gain insight into perception and cognitive processes as you engage with the experiments.

In order to prepare you for particular labs, it will be necessary for at least some class time to consist of short lectures/discussion on the context and background for the experiments. However, this is not intended to be a survey course but rather a practical hands-on methods course. Class lectures will be recorded so that they can be viewed asynchronously.

The course is intended to empower you with basic critical thinking and computer skills that will serve you well regardless of your future endeavors. You will learn how to perform basic statistical calculations and present your data visually using Microsoft Excel.

Required Text

There is no required text for the course, but research articles will be made available on each of the topics covered and will help students understand concepts and writing the associated assignments. A textbook in Sensation and Perception will also be helpful in illustrating concepts.

Course Requirements and Assessment:

Note that evaluation dates below are estimates and subject to change.

Assessment	Date of Evaluation (if known)	Weighting
Assignment 1	October 1 st	10%
Assignment 2	October 8 th	10%
Assignment 3	October 22 nd	10%
Assignment 4	October 29 th	10%
Assignment 5	November 5 th	10%
Assignment 6	November 12 th	10%
Assignment 7	November 19 th	10%
Final Assignment	TBD (during final exam period)	20%
Experiments / Exercises (weekly)	December 14th	10%
Total		100%

Description of Assignments

There will be 7 regular assignments due every week between September 24th and November 12th, each based on the lecture topic from the previous week, and each worth 10%. There will be also be a final assignment due during the exam period, which will be based on the experiment created by the students, and which will be worth 20%. Finally, weekly participation in the experiments and exercises provided by the instructor, as well as the experiments created by the students themselves, will be worth 10% of the total grade.

Class Format and Attendance Policy

Attendance is not mandatory, but strongly encouraged. Students who attend will get a chance to ask questions about exercises and assignments, and gain helpful information about each week's topic that will be useful when writing the assignments.

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 89, B+=75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar – <u>Grading Scheme</u> <u>for 2024-2025</u>

Missed Tests/Midterm Exams/Late Assignment

For any missed quiz or late assignment, students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office. At this time, due to COVID-19 an Attending Physician's Statement (APS) is not required, however, a reason for missing an evaluated component in the course must be provided.

HH PSYC: Missed Tests/Exams Form. Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed quiz or late assignment.

Add/Drop Deadlines

For a list of all important dates please refer to: Fall/Winter 2024-2025 Important Dates

	Fall (Term F)	Year (Term Y)	Winter (Term W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 18	Sept. 18	Jan. 20
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 2	Oct. 16	Jan. 31
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 8	Feb. 7	March 14
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	Nov. 9 - Dec. 3	Feb. 8 - April 4	March 15 - April 4

Add and Drop Deadline Information

There are deadlines for adding and dropping courses, both academic and financial. Since, for the most part, the dates are **different**, be sure to read the information carefully so that you understand the differences between the sessional dates below and the Refund Tables.

You are strongly advised to pay close attention to the "Last date to enrol without permission of course instructor" deadlines. These deadlines represent the last date students have unrestricted access to the registration and enrolment system.

After that date, you must contact the professor/department offering the course to arrange permission.

You can drop courses using the registration and enrolment system up until the last date to drop a course without receiving a grade (drop deadline).

You may withdraw from a course using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as 'W'. The withdrawal will not affect your grade point average or count towards the credits required for your degree.

Academic Integrity for Students

York University takes academic integrity very seriously; please familiarize yourself with <u>Information about the Senate Policy on Academic Honesty</u>.

It is recommended that you review Academic Integrity by completing the <u>Academic Integrity Tutorial</u> and <u>Academic Honesty Quiz</u>

Test Banks

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as "Cheating in an attempt to gain an improper advantage in an academic evaluation" (article 2.1.1 from the Senate Policy) and/or "encouraging, enabling or causing others" (article 2.1.10 from the Senate Policy) to cheat.

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 university encourages students with disabilities to register with Student Accessibility Services (SAS) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors as necessary. Please let me know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course.

https://accessibility.students.yorku.ca/

Excerpt from Senate Policy on Academic Accommodation for Students with Disabilities

1. Pursuant to its commitment to sustaining an inclusive, equitable community in which all members are treated with respect and dignity, and consistent with applicable accessibility legislation, York University shall make reasonable and appropriate accommodations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. This policy aims to eliminate systemic barriers to participation in academic activities by students with disabilities.

All students are expected to satisfy the essential learning outcomes of courses. Accommodations shall be consistent with, support and preserve the academic integrity of the curriculum and the academic standards of courses and programs. For further information please refer to: York University Academic Accommodation for Students with Disabilities Policy.

Course Materials Copyright Information

These course materials are designed for use as part of the PSYC 4260 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. <u>Intellectual Property Rights Statement</u>.

Course Schedule (weekly topics subject to change)

Week/Date	Topic(s)
Week 1 / Sept 10 th	Course overview, Introduction and Planning
Week 2 / Sept 17 th	Topic: Anatomy of the Eye
Week 3 / Sept 24 th	Topic: Blind Spot
	Assignment due: Anatomy of the Eye
Week 4 / Oct 1 st	Topic: Adaptation
	Assignment due: Blind Spot
Week 5 / Oct 8 th	Topic: Size Perception
	Assignment due: Adaptation
Week 6 / Oct 15th	**Reading Week – no class**
Week 7 / Oct 22 nd	Topic: Feature Integration and Visual Search
	Assignment due: Size Perception
Week 8 / Oct 29 th	Topic: Face Perception
	Assignment due: Feature integration
Week 9 / Nov 5 th	Topic: Stroop
	Assignment due: Face Perception
Week 10 / Nov 12 th	Topic: Make your own experiment
	Assignment due: Stroop
Week 11 / Nov 19 th	Topic: Make your own experiment
Week 12 / Nov 26 th	Topic: Make your own experiment
Week 13 / Dec 3 rd	Topic: Data analysis + overflow / review