

PSY280H1S LEC0101– Introduction to Sensation and Perception

Mondays 10 am - 1 pm
SS2118

Course Delivery

This is an in-person course. Students are expected to attend lectures in-person whenever possible. Lectures will be recorded for later viewing, but you must attend in person to get the participation credit.

If external circumstances change (e.g. public health guidelines, instructor illness/quarantine, etc.), the course may need to move online for one or more lectures.

Contact Information

Course Instructor:

Dr. Christine Burton

email: christine.burton@utoronto.ca

Office hours via Zoom

Sign-up for office hours required at

<https://calendly.com/christine-burton/office-hour-1>

All office hours will be individual 15-minute appointments during the following times :

Mondays 1:30-2:30 pm online only

Wednesdays 2-3 pm online or in person (SS4001)

Thursdays 10-11 am online only

Teaching Assistants:

Athanasios Bouragos: athan.bouragos@mail.utoronto.ca

Ziming Cheng: ziming.cheng@mail.utoronto.ca

Emily Heffernan: Emily.heffernan@mail.utoronto.ca

The TAs will be available to meet with students after the distribution of graded tests and assignments.

Course Description

What you see, hear, taste, and smell is not only a product of sensory stimulation, but also your brain's attempt to make sense of that information. Perception is the gateway between the external world and our internal representation of what is going on around us. In this course, you will be introduced to current empirical research in perceptual science. You will develop a greater awareness of the biological underpinnings of how you perceive the world and how actively interprets information from the environment.

Learning Outcomes

By the end of this course, students should be able to

- **Distinguish** between sensation and perception.
- **Describe** the anatomy of our sense organs
- **Measure** perceptual sensitivity and discrimination using the classic techniques of psychophysics and signal detection and present the data in the form of tables or graphs.
- **Explain** how sensory stimuli are transduced into a neural signal to create a perception of the world
- **Explain** how we use vision to perceive objects, depth, motion and colours
- **Describe** how sound waves become a mental perception
- **Describe** our cutaneous and chemical senses
- **Apply** your knowledge of perception to real-world problems
- **Communicate** understanding of the adaptive function and biological underpinnings of sensory phenomena.

Reading Material

Goldstein, E. B. & Cacciamani, L. (2022). *Sensation & Perception, 11th ed. with MindTap*. Cengage.

You have the option of purchasing either a 6-month subscription to MindTap and the interactive ebook (\$64.95) OR a hard copy text that includes 6-month access to MindTap (\$189.95).

Course Evaluation

Midterm test	February 12 10 am – 12 pm	28%	Application assignments	February 26 and April 1	2 @ 15% each = 30%
Final Exam	April 10-30; date TBD 120 minutes	33%	Kahoot participation	Ongoing	4%
MindTap Homework	Ongoing	5%	Bonus experiment participation	Ongoing	1%

Tests

There will be a midterm test and a final exam in this course. Both the test and the final exam will be held in-person. If public health and/or university guidelines change, the test and/or exam may need to shift online. The test and exam will consist of multiple choice and short answer questions. The final exam will be cumulative and will cover all material from the course.

Bonus Experiment Participation

You have the opportunity to receive 1% bonus credit by participating in a psychology experiment in the Cognitive Neuroscience Lab. Participating in an experiment is an excellent way to experience how research is conducted in psychology and it is vital to the ongoing research in the field. To sign up for an experiment go to <https://utsg-ferberlab.sona-systems.com/> and register as a new user with your UTOR email. Detailed instructions are available on Quercus. If you do not want to participate in an experiment there is still an opportunity for you to receive a bonus point. Please email your instructor for instructions about an alternate assignment.

Participation

There are 2 types of participation in this course.

The first participation component requires you to complete a chapter quiz on MindTap after reviewing the relevant material. Research has demonstrated that a good way to learn material is to be tested on it. With that goal in mind, these quizzes are based on lecture and textbook material and will help as practice questions for the test and exam. Your score will be calculated as the total number of correct answers out of all questions multiplied by 5% (for example, if you get 80 questions correct out of 100 questions asked throughout the term, your score will be 4 points added to your final grade). The quizzes will be due before each assessment date (e.g. first half of material due before the midterm, second half due before the exam).

The second is your participation in quizzes during class. I will prepare quiz questions based on that day's lecture material that you will answer using the free app "Kahoot" (kahoot.it). These questions will be scored based on participation only. To receive the full 4% participation, you are expected to be present for at least 8 of the 11 lectures (0.5% each x 8).

Assignments

I intend the assignment in this course to give you the opportunity to examine a topic from your own perspective. For the assignment, I will provide a number of different scenarios to which you can apply the perception concepts you are learning about in class. Each scenario describes a specific “real-life” problem that you must solve. You should choose one of these scenarios to write about for your thought paper. Each scenario will include specific goals you must meet and outcomes you must describe in your paper. The purpose of this assignment is to provide you with the opportunity to examine the topics we discuss in class and see how they can be applied to everyday situations. These assignments will be graded based on the ability of your solution to solve the proposed problem as well as the quality and clarity of your writing. The page limit for the paper is 4 pages double-spaced. Detailed instructions about the assignments can be found on Quercus.

All written assignments will be submitted via Quercus. **It is your responsibility to ensure that you have submitted the correct file and that it can be opened.** After submitting your paper, please double check that it has not been corrupted, that it is written in English characters, and that you didn't submit a paper from a different course. You will be responsible for any late penalties that accrue if you need to submit the correct paper after the due date.

Plagiarism Detection Tool

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

Students who wish to opt-out of using the University's plagiarism detection tool for the case study assignment must notify the instructor (via Quercus inbox message/email) no later than 5PM on January 20. Upon receipt of notification, the instructor will request that the student provide all rough work (including, but not limited to, call numbers and/or URLs for all cited sources) when submitting their case study assignment.

Course Webpage

This Course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. New information and resources will be posted regularly as we move through the term. To access the course website, go to the U of T Quercus log-in page at <https://q.utoronto.ca>. SPECIAL NOTE ABOUT GRADES POSTED ONLINE: Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

IMPORTANT COURSE POLICIES ****PLEASE READ****

Email

The main source of communication in the course will be email. **Please include the course number and lecture section (PSY280) in the subject line in all your emails about the course. Avoid sending me messages directly from Quercus/Canvas.** These messages always end up in my “other” folder so I may not get to them quickly.

For all issues that apply to course material/other students in the class, please refer to the FAQ on Quercus. If you don't see it on the FAQ, please email me and I will add it!

Requests for Re-grading

Any requests to re-grade tests or experiment reports should be made in a timely fashion. All requests to re-grade term tests or lab reports must be made within 2 weeks of the return of the graded report. **Please direct all requests for re-grading directly to the TA who marked your work.** If you are dissatisfied after meeting with the TA you may submit your work to the instructor. Keep in mind that if you submit your work to be re-graded, your grade could go up or down. This policy applies to work submitted to the instructor or the TAs.

Missed Test Special Consideration Request Process

If the midterm test for reasons beyond your control (illness or accident), please contact me with documentation in support of your specific circumstances within one week of the missed test. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, you can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see <http://www.illnessverification.utoronto.ca>. For information on Absence Declaration Tool for A&S students, please see <https://www.artsci.utoronto.ca/absence>. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

If your request is approved, you will have one opportunity to write a make-up test. If you miss the make-up test and can provide documentation to support your request, the weight of the missed test will be redistributed to the final exam.

Students who miss final examinations should file a petition for a deferred exam with their College Registrar's Office.

Accommodations for Personal Reasons

There may be times when you are unable to complete course work on time due to non-medical reasons. If you have concerns, speak to me. Extensions for term work can be arranged on a case-by-case basis. It is also a very good idea to speak with an advisor in your College Registrar's office; they can support you in requesting extensions or accommodations, and importantly, connect you with other resources on campus for help with your situation.

As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation, financial concerns, family worries and so forth. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities. Everyone feels stressed now and then – it is a normal part of university life. Some days are better than others, and there is no wrong time to reach out. There are resources for every situation and every level of stress. There are many helpful resources available through your College Registrar or through Student Life (<http://studentlife.utoronto.ca> and <http://www.studentlife.utoronto.ca/feeling-distressed>). An important part of the University experience is learning how and when to ask for help. Please take the time to inform yourself of available resources.

Penalties for Lateness

The penalty for lateness is 5% of the total per calendar day.

Students who seek to be granted more time to complete their term work beyond the due date without penalty, owing to circumstances beyond their control (e.g., illness, or an accident), must do so by submitting a request directly to the Instructor for the period up to and including the last day of the final assessment period.

Any term work that will be handed in **after** the final assessment period is subject to a petition for extension of term work. This petition should be filed with the student's College Registrar's Office.

Academic Resources

Accessibility Needs

Students with diverse learning styles and needs are welcome in this course. If you have an ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (accessibility.utoronto.ca) at the beginning of the academic year. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will then assess your medical situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your condition with any instructor, and your instructors will not reveal that you are registered with AS.

Writing

As a student here at the University of Toronto, you are expected to write well. The university provides its students with a number of resources to help them achieve this. For more information on campus writing centres and writing courses, please visit <http://www.writing.utoronto.ca/>.

Privacy and Copyright Disclaimer

Notice of video recording and sharing (Download permissible; re-use prohibited)

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session.

For questions about recording and use of videos in which you appear please contact your instructor.

Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor.

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. Course materials such as PowerPoint slides and lecture recordings are made available to you for your own study purposes. These materials cannot be shared outside of the class or "published" in any way. Posting recordings or slides to other websites without the express permission of the instructor will constitute copyright infringement.

Academic Integrity and Plagiarism

All suspected cases of academic dishonesty will be investigated following procedures outlined in the [Code of Behaviour on Academic Matters \(https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019\)](https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019). If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For example, to learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <http://www.writing.utoronto.ca>. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see [A&S Student Academic Integrity \(https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity\)](https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the [University of Toronto Website on Academic Integrity \(https://www.academicintegrity.utoronto.ca\)](https://www.academicintegrity.utoronto.ca).

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on

Academic Matters (www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Please note that the use of generative artificial intelligence tools and apps is strictly prohibited in all course assignments unless explicitly stated otherwise by the instructor in this course. This includes ChatGPT and other AI writing and coding assistants. Use of generative AI in this course may be considered use of an unauthorized aid, which is a form of cheating.

Course Outline

Date	Topic	Reading
January 8	Introduction to perception	Chapter 1
January 15	Measuring perception	Appendices A-C
January 22	The eye and seeing	Chapters 2 and 3
January 29	The brain and seeing	Chapters 3 and 4
February 5	Perceiving objects	Chapters 4 and 5
February 12	Midterm Test	Chapters 1-5 and appendices
February 19	Reading Week	
February 26	Colour vision Assignment 1 due @ 11:59 pm	Chapter 9
March 4	Taking action and perceiving motion	Chapters 7 and 8
March 11	Perceiving depth and size	Chapter 10
March 18	Hearing	Chapter 11; Chapter 12 (sections 12.1 – 12.3)
March 25	Cutaneous senses and proprioception	Chapter 15
April 1	Chemical senses Assignment 2 due @ 11:59 pm	Chapter 16