Psychology
UNIVERSITY OF TORONTO

PSY 280H1 Fall 2024 – Sensation and Perception
Online, synchronous, Mondays at 2 pm

Contact Information	
Instructor: Dirk Bernhardt-Walther	**Teaching Assistant(s):** Ziming Cheng Daniel Lougen Mateja Perovic
Preferred communication: Message in Quercus **Email:** dirk.bernhardt.walther@utoronto.ca	**Preferred communication:** Message in Quercus
Office Hours: Mondays, 2 – 3 pm on Zoom	

*This course follows a flipped classroom model. Students will access and engage with the course content online in their own time. Class meetings are reserved for questions and answers and any additional clarifications. I will **not** lecture during class meetings.*
Attendance for class meetings is not mandatory. The midterm test will be online, synchronous, during the assigned class time.

Course Description, Goals, and Prerequisites

The purpose of this course is to examine how we perceive our environment through our senses. As we will find out in this class, there are two parallel realities, the physical reality around us, and the psychological reality inside of our brain. In many cases, these two realities can be quite distinct. In the class we will explore how these two realities interact. We will discuss the physical, physiological and cognitive aspects of perception that are related to the senses of vision, hearing, touch, smell, and taste.

Goals:
Upon successful completion of this course, students will be able to:
- describe the sensory systems;
- distinguish between sensation and perception;
- explain how sensory and perceptual processes shape our experience of "reality";
- explain the basic principles of classical psychophysics;
- explain how human sensory systems respond to energy in the physical environment (i.e. light waves, air pressure, chemical molecules, etc.), transforming it into a perceptual experience that the brain can understand (i.e. sight, sound, smell, etc.);

- compare and contrast the five sensory systems in terms of their sensory/anatomical setup and perceptual organization;
- explain the roles of prior knowledge, and inference in our perceptual judgments and our conscious experiences;
- identify and define the leading terms, concepts, theoretical perspectives, empirical findings, and historical trends in the study of sensation and perception;
- compare and contrast psychological principles, theories, and methods as they pertain to sensory and neurological systems;
- critically read, understand, and evaluate scientific literature, understand and use scientific and technical vocabulary, and synthesize information from multiple sources.

Writing Integrated Teaching: This course is partnered with the Writing Integrated Teaching Program (WIT). Writing is a critical skill in every discipline, but it is not often one that is directly taught outside of English courses. However, every discipline has a unique style of writing— psychology included! This course is specifically designed to integrate low-stakes opportunities to practice psychology-specific writing skills as you learn the content, in order to give you a chance to develop and receive feedback on this important set of practices.

Plagiarism Detection: Students will be required to submit their course essays through Packback Deepdives, which includes a plagiarism detection tool. 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.

Prerequisites: PSY100H1/ PSY100Y5/ PSYA01H3/ COG250Y1
Exclusions: PSY280H5/ PSYB51H3

Note about prerequisites: It is your responsibility to ensure that you have met *all* prerequisites listed in the Psychology section of the A&S Calendar for this course. If you lack any prerequisites you WILL BE REMOVED. No waivers will be granted.

Reading Material

Jeremy M. Wolfe, Keith R. Kluender and Dennis M. Levi, Sensation & Perception, 6th edition, 2021. (ISBN-13: 978-1605359724).

The textbook will helpful for following the class, but it is not strictly needed. The book is available in hardbound, loose-leaf and ebook editions. All of these are acceptable. All three version are available at the U of T bookstore.

Several copies of the textbook are available at Robarts Library.

Lecture materials:
Lecture slides, videos, assignments, and quizzes will all be posted on Quercus. Following the communications on Quercus closely is essential for this online course. Keeping up with readings and tasks is your responsibility.

Course Structure

The course is structured around five Units, each lasting between two and three weeks. There will be a Unit 0 in the beginning of the class to familiarize you with the class structure.

For each Unit, you should:
- Watch the lecture videos,
- Perform class activities,
- Participate in the Packback Discussion Forum,
- Complete the writing assignment for two of the four posted assignments.

This course follows a flipped classroom model. Students will access and engage with the course content online in their own time. Class meetings are reserved for questions and answers and any additional clarifications. I will not lecture during class meetings. Attendance for class meetings is not mandatory.

Course Assessment

Evaluations consist of the following components (total 1000 points):

i) Participation in the Packback Discussion Forum (50 points)
Participation is a requirement for this course, and the Packback Questions platform will be used for online discussion about class topics. Packback Questions is an online community where you can be fearlessly curious and ask open-ended questions to build on top of what we are covering in class and relate topics to real-world applications.

Packback Requirements:
The deadline for submitting questions on Packback will be Tuesday night, when the Unit finishes. Responses can be submitted until the following Friday night.
Your Packback score (50 points total, 10 for each assignment) will be determined by you meeting the minimum expectations for each deadline:
- 2 open-ended questions worth 2.5 points each
- 4 responses, worth 1.25 points each
  Full points will be assigned to questions and responses that reflect some creative and curious engagement with the topic; half points will be given for responses that are related to the topic but have very low levels of creativity and curiosity.

Details of how to access Packback will be posted on Quercus.

ii) Class activities (100 points)

In each unit, you will be asked to perform hands-on activities related to the course content. You will be asked to submit evidence of your activities online. The number of activities per unit and the number of points per activity may vary. More details will be posted on Quercus.

iii) Two writing assignments (200 points)

A writing assignment will be posted for each of the units 1-4. Students are asked to complete **two of the four writing assignments** using the Packback Deepdives assignment composition system. Packback Deepdives provides students with AI-powered writing support that helps them clarify their writing and improve their composition. Each assignment is worth 100 points. Details of the assignments and deadlines will be announced on Quercus.

v) Online Midterm (250 points)
A midterm covering the material of Units 0, 1, and 2 will be written online, synchronously during the assigned class time following the end of Unit 2 (see course schedule).

vi) Online Final Exam (400 points)
A final exam covering the material from the entire class will be written during Finals Period. The Final Exam will be online, synchronous at a fixed time for all students.

vii) Extra credit (10 points)
You may receive extra credit of 10 points (1% of the grade) for participating in a 1-hour online psychology experiment. To participate in an online experiment with the BWlab for course credit, please send an email to: bwlab.experiments@gmail.com
The lab will contact you with further instructions.

In total, students can earn up to 1000 points (not counting extra credit).

Course Webpage

The website associated with this course is accessible via https://q.utoronto.ca

Course Policies

Departmental Guidance for Undergraduate Students in Psychology
The Department of Psychology recognizes that, as a student, you may experience disruptions to your learning that are out of your control, and that there may be circumstances when you need extra support. Accordingly, the department has provided a helpful guide to clarify your and your instructor's responsibilities when navigating these situations. This guide consolidates Arts & Science Policies for undergraduate students in one place for your convenience. As an instructor in the department, I will frequently consult with these recommendations when providing you with support, and I recommend that you also consult it to learn more about your rights and responsibilities before reaching out to me.

Use of Generative AI
Artificial Intelligence (AI) can mimic human composition. My goal in this class is to teach you how to express your knowledge about *Sensation and Perception* in writing. AI can serve a useful purpose by tutoring you in your writing. This is implemented in the AI-assisted Packback Discussion Forum and Deepdives assignment composition systems. These AI-supported systems as well as feedback from the TAs will help you improve your writing and guide you toward best writing practices. Please see these forms of AI assistance as part of your learning process.

Other than for these particular applications (Packback and Deepdives), the use of generative artificial intelligence (AI) tools is strictly prohibited in all course assessments, including the midterm and the final assessment. This includes, but is not limited to, ChatGPT, GitHub Copilot, and open-source models that you have trained and/or deployed yourself. You may not interact with, nor copy, paraphrase, or adapt any content from any generative AI for the purpose of completing assignments or exams in this course. Use of generative AI will be considered use of an unauthorized aid, which is a form of academic misconduct under the Code of Behavior on Academic Matters.

This course policy is designed to promote your learning and intellectual development and to ensure that our evaluations are a fair and accurate assessment of your learning. Though it may be tempting to use generative AI to assist you when completing your assignments, this will simply inhibit your learning. If the work you submit is essentially the output of generative AI, then what have you learned and what value are you adding? Think of it this way: if a potential employer or supervisor can get as much from an AI tool as what you're able to do yourself, then why should they hire you at all? You should aim to understand course content at a level that far exceeds what an automated tool can achieve. Our course and, in particular, each assignment is designed to help you attain true mastery of the course content. If you have questions or are stuck, please contact the TAs or the instructor, and we'll be happy to help!

Missed Tests
I have built a lot of flexibility into the course. You have a choice of two out of four writing assignments with different deadlines throughout the semester. If you are unable to follow the class online due to illness, then please contact your College Registrar so that they can discuss accommodations with me. Students have up to one week from the date of the missed test or assignment to contact the instructor and provide documentation (see "Absences due to illness").

Grading Policy
I follow the official University of Toronto, Faculty of Arts and Science grading scheme:
https://advice.writing.utoronto.ca/general/grading-policy/

Requests for Re-grading
All requests to re-grade tests or assignments must be made within 2 weeks of receiving your grade. Please direct all requests for re-grading directly to the person 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.

Penalties for Lateness
You have 2-3 weeks for the Packback discussion contributions and activities for each unit. I will not accept late submissions of these items. Writing assignments will be penalized with 10 points (1% of course grade) deduction per day or fraction of a day late. The midterm should be taken at the assigned time. Excused lateness due to illness needs to be documented. The final exam will be written online and synchronously during the final exam period. Please inform your college registrar if you cannot write the final exam that day.

Religious accommodation
As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of backgrounds, cultural traditions, and spiritual beliefs. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory

holidays. Further to University Policy, if you anticipate being unable to follow the class or missing a major course activity (like a test, or assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

Absences due to Illness
If you become ill and it affects your ability to do your academic work, consult me right away. Normally, I will ask you for documentation in support of your specific medical circumstances. 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.

Accommodation for Personal Reasons
There may be times when you are unable to complete course work on time due to non-medical reasons. You have the option to declare an absence via ACORN one time during the semester. If you have concerns, please speak with an advisor in your College Registrars office; they can support you in requesting extensions or accommodations, and importantly, connect you with other resources on campus for help with your situation.

Written Communication Policy
Please check the syllabus and the class materials posted on Quercus before sending a message on Quercus or an email. You will find answers to most of your questions there. If you cannot find the answer there, then please post your question to the general class discussion on Quercus. It is likely that some of your classmates have the same question. By posting on the class discussion, they will be able to see you question as well as my answer.

I am available to answer questions about lecture material in the online forum as well as through Zoom during office hours. Please address any questions about grading and assessment to your assigned TA. The preferred form of communication for the TAs and the instructor is direct messaging on Quercus.

Finally, please **consider all class communications as professional correspondence**. Proofread your message for spelling and grammar. Do not use short-hands and abbreviations – We are not your Insta/Snapchat/WhatsApp buddies. Remember, **emails and posts on Quercus last forever and cannot be unsent**.

Academic Resources

Ongoing Learning Disability or Accommodation Requirement
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/.

If English is not your first language, you may want to consider the English Language Learning program of the Faculty of Arts and Science:
https://www.artsci.utoronto.ca/current/academic-advising-and-support/english-language-learning

Academic Integrity and Plagiarism
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 (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (https://www.academicintegrity.utoronto.ca/).

Other Resources
Student Life Programs and Services (http://www.studentlife.utoronto.ca/)
Academic Success Services (https://studentlife.utoronto.ca/department/academic-success/)
Counselling and Psychological Services (https://studentlife.utoronto.ca/department/health-wellness/)

Course Outline

Dates	Topic	Reading Assignment
Sept. 3rd – Sept. 10th	Unit 0 – Introduction	Chapter 1
Sept. 11th – Sept. 24th	Unit 1 – Vision I: Fundamentals	Chapters 2, 3, 4
Sept. 25th – Oct. 8th	Unit 2 – Vision II: Color and Depth	Chapters 5, 6
Oct. 21st, 2:30 – 4:30 pm, EDT	Online Midterm, covering Units 0, 1, and 2	Chapters 1-6
Oct. 9th – Oct. 22nd	Unit 3 – Vision III: Attention and Motion	Chapters 7, 8
Oct. 23rd – Nov. 12th	Unit 4 – Hearing	Chapters 9, 10
Oct. 28th – Nov. 1st	*Reading Week*	
Nov. 13th – Dec. 3rd	Unit 5 – Touch and the Chemical Senses	Chapters 13, 14, 15
Date to be announced (Dec. 6th – Dec. 23rd)	Online Final Exam	All course content