

## PSY280H5S – Sensation and Perception: Where the World Meets the Brain IN-PERSON

Friday 9:00am – 12:00pm **ROOM: DV 2074**

### Course Delivery

**Winter 2022 Return to Campus Update:** In order to curb the spread of COVID-19 amid the emergence of the Omicron variant, most in-person learning has been [delayed until Jan 31, 2022](#). Keep in mind this date is subject to change as per the Universities need to monitor any new developments and will be keeping with the latest evidence and public health guidelines.

### Delivery Method until January 31, 2022

**ONLINE VIA Zoom:** The course will be delivered online via Zoom and the link for class will be posted online on Quercus (<http://q.utoronto.ca>). **You will need to login to Zoom with your U of T email address in order to join the lectures. Please make sure that you are registered for a Zoom account using your UTORid and password (<https://utoronto.zoom.us>).** Lectures will be delivered synchronously during the assigned course time (Fridays, 9:10 am – 12:00 pm EST). Lectures will be recorded and made available on Quercus for later viewing. Assignments will be submitted electronically via Quercus.

- **Learn Anywhere Guide for Students**  
<https://library.utm.utoronto.ca/students/quercus/learn-anywhere>
- **University of Toronto tech [requirements for online learning](#)**

### Delivery Method after January 31, 2022

**IN PERSON: University policy permitting,** the class will meet during the scheduled class time (Fridays, 9:10-12:00pm in DV 2074). Lectures will continue to be recorded once the delivery mode changes to in-person instruction, and written assignments (weekly practice questions, observation reports) will continue to be submitted electronically via Quercus. University policy permitting, the mid-term test and final exam will be held in person.

### Contact Information

**Dr. Anna Kosovicheva**  
[a.kosovicheva@utoronto.ca](mailto:a.kosovicheva@utoronto.ca)

**Office hours:** Meeting time slots will be available for booking at <https://tinyurl.com/ProfK> (select from virtual or in-person; please note that all meetings will be virtual until Jan. 31). Additional drop-in hours will be announced throughout term. If the available times do not work for you, please send me an email.

**Teaching Assistants:**  
**Hamid Moeiniasl**  
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**Office hours:** TA office hours will be announced separately on Quercus

**Email policy:** Emails should be sent to the email addresses listed above. Please include “PSY280” in the subject line, and allow up to 48 hours for the instructor or the TAs to reply to your email (not including weekends). If you’re having trouble understanding the material, please see one of us in office hours rather than sending an email.

## 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*

- 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 senses
- Identify common principles in how the brain analyzes information across different sensory systems
- Apply your knowledge of perception to real-world problems
- Communicate understanding of the adaptive function and biological underpinnings of sensory phenomena.

## Reading Material

**Recommended:** Wolfe, J. M., et al. (2020). *Sensation and Perception*. 6th Ed. Oxford University Press

## Course Evaluation

Assessment	Date	Grade percentage
Midterm Test	March 4 <sup>th</sup> at 9:10 am – 11:10 am (2 hours)	30%
Final Exam	TBA (exam period; 2 hours)	35%
Observation Report 1	Due February 18 <sup>th</sup> at 9:10 am	14%
Observation Report 2	Due April 1 <sup>st</sup> at 9:10 am	14%
Weekly Practice Questions	Ongoing	7%

**Test/Exam (Midterm: 30% + Final: 35% = 65%):**

The class will have one midterm exam and one final exam, and these will be all multiple-choice and **closed-book, closed-notes**. Both the midterm and final exams will be based on the material covered in lecture. I will post pdf versions of the slides on Quercus, but these are just outlines, and you are expected to take notes in class to supplement the content on the slides, as all lecture material is testable (this includes diagrams, videos, demos, etc.).

The textbook is strongly recommended, but not required. The lectures can cover challenging concepts that are also explained in the textbook, so you are strongly encouraged to use the textbook to fill in any gaps if there's anything you miss or don't understand from lecture. I will never explicitly test on material that is in the textbook, but not covered in lecture.

- **Midterm Test (30%):** The midterm exam will cover course material from January 14th through February 18th. It will be on March 4th at 9:10 am. The exam will be two hours long.
- **Final Exam (35%):** The final exam will be scheduled during the final exam period. The exam will be multiple choice and cover course material from March 11th through April 8th (i.e., it will be non-cumulative). The exam will be two hours long. I will not explicitly test on material from the first half of term, although there are many recurring concepts in this course, so some questions may build on your knowledge of material covered throughout term.

**Observation Reports (2 reports x 14% each):** An important part of studying perception is drawing on your own experiences and understanding how perceptual phenomena relate to your everyday life. With this in mind, you will complete two short essay assignments (~2 double-spaced pages each) based on a prompt that will be provided to you. Details for each assignment will be posted on Quercus. These will be due at the beginning of class (9:10 am) on Quercus by their due dates (Feb. 18th and April 1st).

**Weekly Practice Questions ("WPQ"s: 7%):** After each lecture, a few multiple-choice questions will be available for you to complete on Quercus, based on that week's lecture. You can complete these **at any time before the next class** (i.e., the questions for Lecture 1, "WPQ1" will be due no later than 9:10am on the day of Lecture 2), so you will have the whole week. The goal of these questions is to reward you for keeping up with the material each week! These will be posted as untimed Quercus quizzes, and you can use the lecture slides, the recordings, and/or your book to answer these questions, but these should be completed **on your own** (i.e., do not share answers with your classmates). There will be one set of questions for each lecture (10 Question Sets), and your lowest 2 of 10 scores will be dropped. After they are due, you can review the answers and use these as a tool to help you prepare for the exams.

#### **Class format:**

The class will consist of one three-hour lecture each week, and pdf versions of the slides will be posted before each lecture on Quercus. As noted above, these slides are only an outline, and are not a substitute for your own notes.

I will also do my best to make recordings available after each lecture. However, watching the recordings alone is **not** a substitute for attending lecture, and you are strongly advised to attend class each week. In rare cases, recordings may fail due to errors, and I can't guarantee that they will be available each week.

Written assignments submitted through Quercus will be screened for possible plagiarism using the University's plagiarism detection tool. Please note the following:

***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>).***

In accordance with university policy, you may opt out of using the University's plagiarism detection tool. If you plan to opt out of the University's plagiarism detection tool, please notify the instructor in writing **at least two weeks before the assignment is due** so that alternate arrangements can be made (e.g., providing notes and a draft or outline to support the originality of your work).

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### Course Webpage

The website associated with this course is accessible via <http://q.utoronto.ca>

**Note:** You don't need to create a new login for Canvas; it already knows who you are. You just need your UTORid and password. This is the same login that gets you onto the wireless network with your laptop, and the same one that you use to check your email. If you're confused about your UTORid or don't remember your password, go to: <https://www.utorid.utoronto.ca/>

In order to access course material, monitor course information, and view your grades you must log into Canvas. If you have any general questions regarding Canvas, please visit the following help site:

<https://library.utm.utoronto.ca/faculty/canvas>

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### IMPORTANT COURSE POLICIES **\*\*PLEASE READ\*\***

#### **Missed Test Special Consideration Request Process**

Students who miss a test due to circumstances beyond their control (e.g. illness or an accident) can request that the Department grant them special consideration. Students must present their case to the Department (NOT the Instructor) by submitting a request via the online Special Consideration Request form at:

<https://utmapp.utm.utoronto.ca/SpecialRequest>.

**Important note:** Once the test/exam is available online or in-person and you're unable to write or have an approved request to miss, DO NOT at any point attempt to access/write the test/exam. If at any time you access the test/exam or sit down to write, you will NOT be able to submit a special consideration and/or your request will be refused.

**If your request is approved by the department, the weight of the missed test will be redistributed to the final exam.**

#### **Extension of Time Special Consideration Request Process**

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 term. The decision as to whether or not to apply a penalty for the specified period rests with the Instructor.

Students who seek to be granted more time to complete term work beyond the last day of the term must submit their request directly to the Department. This request covers the period following the last day of classes and ends the last day of the exam period. This is done by submitting a request via the online Special Consideration Request form at <https://utmapp.utm.utoronto.ca/SpecialRequest>. You are advised to seek advising by the departmental Undergraduate Counsellor prior to the deadline.

#### **Supporting Documentation**

The University is temporarily suspending the need for a doctor's note or medical certificate for any absence from academic participation. However, you are required to use the Absence Declaration tool on ACORN found in the Profile and Settings menu to formally declare an absence from academic participation. The tool is to be

used if you require consideration for missed academic work based on the procedures specific to our campus/department.

### **Missed Final Exam or Extension of Time beyond exam period**

Missed final exams or for extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <http://www.utm.utoronto.ca/registrar/current-students/petitions> and follow their procedures.

### **Penalties for Lateness**

A penalty of 10% per calendar day (i.e., including week-ends and holidays, during which students are not able to submit term work) up to and including the last day of classes, will be applied by the Instructor. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counsellor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful.

### **Academic Guidelines**

It is your responsibility to ensure that you have met all prerequisites listed in the UTM Calendar for this course. If you lack any prerequisites you WILL BE REMOVED from the course up until the last day to add a course. Further information about academic regulations, course withdrawal dates and credits can be found in the University of Toronto Mississauga Calendar at: <http://www.erin.utoronto.ca/regcal/>.

You are encouraged to read this material. If you run into trouble and need advice about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Robert Gillespie Academic Skills Centre at 905-828-5406.

### **AccessAbility Services**

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs. Students requiring academic accommodations for learning, physical, sensory, or mental health disabilities or medical conditions should contact the AccessAbility Office (2037B Davis Building), 905-828-3847.

<http://www.utm.utoronto.ca/accessability/>

### **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. 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. For questions about recording and use of videos in which you appear please contact your 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 Honesty 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 Mississauga is a strong signal of each student's individual academic achievement. As a result, UTM treats cases of cheating and plagiarism very seriously.

The University of Toronto's Code of Behaviour on Academic Matters outlines behaviours that constitute academic dishonesty and the process for addressing academic offences. Potential offences include, but are not limited to:

### In papers and assignments:

1. Using someone else's ideas or words without appropriate acknowledgement.
2. Submitting your own work in more than one course without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment.

### On tests and exams:

1. Using or possessing unauthorized aids.
2. Looking at someone else's answers during an exam or test.
3. Misrepresenting your identity.

### In academic work:

1. Falsifying institutional documents or grades.
2. Falsifying or altering any documentation required, including (but not limited to) doctor's notes.

With regard to remote learning and online courses, UTM wishes to remind students that they are expected to adhere to **the Code of Behaviour on Academic Matters** regardless of the course delivery method. By offering students the opportunity to learn remotely, UTM expects that students will maintain the same academic honesty and integrity that they would in a classroom setting. Potential academic offences in a digital context include, but are not limited to:

### Remote assessments:

1. Accessing unauthorized resources (search engines, chat rooms, Reddit, etc.) for assessments.
2. Using technological aids (e.g. software) beyond what is listed as permitted in an assessment.
3. Posting test, essay, or exam questions to message boards or social media.
4. Creating, accessing, and sharing assessment questions and answers in virtual "course groups."
5. Working collaboratively, in-person or online, with others on assessments that are expected to be completed individually.

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**.

## **Academic Rights**

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change marks' assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use turnitin.com (you must be offered an alternative form of submission).
- Have access to your instructor for consultation during a course or follow up with the department chair if the instructor is unavailable.
- Ask the person who marked your term work for a re-evaluation if you feel it was not fairly graded. You have up to one month from the date of return of the item to inquire about the mark. If you are not satisfied with a re-evaluation, you may appeal to the instructor in charge of the course if the instructor did not mark the work. If your work is remarked, you must accept the resulting mark. You may only appeal a mark beyond the instructor if the term work was worth at least 20% of the course mark.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth more than 25% in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.
- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

### **Equity Statement**

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at [edo.utm@utoronto.ca](mailto:edo.utm@utoronto.ca) or the University of Toronto Mississauga Students' Union Vice President Equity at [vpequity@utmsu.ca](mailto:vpequity@utmsu.ca).

## Course Outline

Please note that this outline is subject to change depending on the needs of the class (we may need additional time to cover a topic). Any changes to the syllabus will be announced in class one week before.

Date (* = online)	Lecture	Topic	Textbook (Recommended)	Due: (WPQ = weekly practice questions, due Fridays by 9:10am on Quercus)
1/14 *	1	Introduction Light, optics, and eyes	Ch. 2	
1/21 *	2	Retina, Neurons, Receptive fields	Ch. 2 & 3	WPQ1
1/28 *	3	Modules and maps Pattern and Shape Perception	Ch. 3	WPQ2
2/4	4	Surfaces and objects Light & Shadow	Ch. 4	WPQ3
2/11	5	Object Recognition	Ch. 4	WPQ4
2/18	6	Depth	Ch. 6	WPQ5 Observation Report 1 due on Quercus at 9:10 am
<b>2/25</b>		<b>READING WEEK – No class</b>		
3/4		Midterm Exam (Tentatively in-person) No lecture		
3/11	7	Depth Continued Motion	Ch. 8	WPQ6
3/18	8	Colour	Ch. 5	WPQ7
3/25	9	Attention & Awareness	Ch. 7	WPQ8
4/1	10	Hearing	Ch. 9 & 10	WPQ9 Observation Report 2 due on Quercus at 9:10 am
4/8	11	Touch Multisensory Integration	Ch. 13	WPQ10
TBA		Final Exam (Tentatively in-person, scheduled during the final exam period: April 11-25)		

**Final exam:** During exam period, it is the student's responsibility to be available for the entire exam period.

Dates marked with an **asterisk (\*)** indicate lectures that will be held **online**, based on University guidance at the time the syllabus was prepared, and are subject to change.