

PSY280H5S - Sensation and Perception: Where the World Meets the Brain

Wednesday 9:00am – 12:00pm

Room Location: MN 1210 (Maanjiwe Nendamowinan)

Contact Information

Dr. Brett Beston

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Office Hours:

Wednesday 1-2pm

(Deerfield 4010)

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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.

Exclusion: PSY280H1/PSYB51H3

LEARNING OBJECTIVES

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

- **Distinguish** between sensation and perception.
- **Describe** the properties of sensory stimuli.
- **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
- **Describe** the rules (or in some cases 'laws') that govern how we perceptually organize the world around us.
- **Describe** the anatomy and the functional organization of the sensory systems.
- **Apply** knowledge of sensation and perception to real world examples.
- **Communicate** understanding of the adaptive function and biological underpinnings of sensory phenomena.

CLASS FORMAT

Classes will consist of one 3-hour lecture each week. Please plan to attend lectures. Lecture slides will be posted on Portal before class. Recordings of may be posted after lecture. **PLEASE NOTE:**

- *Simply reviewing the posted lecture notes **will not** provide you with all the details discussed in lecture and more importantly; a contextual framework of the material that we are learning about.*
- *Although lectures will be recorded for your benefit, **do not** rely upon recordings as your main point of contact with the course or to supplement your attendance. In some unfortunate instances, lecture recordings will fail due to software or user error. As your instructor, I simply cannot guarantee that lecture recordings will be provided each week.*

Reading Material

978-0-9866151-0-8	CEI (TopHat) / TOPHAT/ONE SEMESTER SUBSCRIPTON
978-1-77330-433-5	CEI(TOPHAT)BESTON / SENSATION & PERCEPTION

This course will be supported using a Top Hat digital text weekly in-class exercises. I have worked with Top Hat to provide an affordable learning package. The digital text is NOT a short-term subscription and you will have continuing access to the text materials.

Course Evaluation

Tests and Exams (70%)

Mid-Term Test 30%
Exam – 40%

Term tests and final exam will be based on the material from the textbook, lectures and additional reading (if they are assigned). The term test and the final exam will consist of multiple-choice questions, shorter and longer questions as well as diagrams requiring you to label parts sensory systems (based on lectures and textbook). The shorter and longer questions will require students to recite information but also integrate knowledge analytically.

The **Mid-term test** will take place during regularly scheduled class hours, in our regular class room. The term test will be 1.5 hours in duration.

Assignments (25%)

Assignment 1 (10%): Working in groups of two or three, you will be asked to explore the basis of perceptual illusion. You will be expected to create a social media post intended to inform/educate a broad audience using visuals and text.

Assignment 2 (15%): Working in groups of two, you will use an inquiry based process to deepen your understanding about a perceptual phenomena. Student will be required to submit both individual and group work to communicate your learning through written or multi-media presentation. Assignments are to be posted on-line and submitted on-line in our Quercus 'Turnitin' dropbox. This submission processed is synced with Turnitin.com 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 Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Course 'Engagement' Credit (CEC, up to a MAXIMUM of 5%).

Students will receive credit for participating in course related activities. The list below outlines different ways that YOU can participate you earn course engagement credit. **Students can select which activities they choose to contribute to (or not) up to a maximum of 5% towards your final grade!**

***Course Engagement Credit (CEC) must be completed by the last day of classes*.**

Ways to Participate:

(CEC #1) Participate in a peer review = 4%

In conjunction with our assignments, you will be provided with two opportunities to review the work of other students and provide helpful suggestions to improve the quality of the work of others (and your own). You will be asked to provide helpful feedback on effective writing communication, presentation of evidence, discipline specific formatting (using the APA conventions) and reflections of your own work. There will be 2 opportunities during the term, **2% for each participation.**

(CEC #2) Participate in our weekly “IN-CLASS” questions = 4%

Please note: A purchase of Top Hat software that is included with the text is required to participate in these activities.

Answer questions during class and earn credit for doing so! Credit is assigned for participation, not “correct-ness” of each response. There will be eleven classes with Top Hat activities over the course of the term. Credit will be assigned based attendance and participation (**NOT** the number of questions in each class, or by the ‘correctness’ of responses provided. You can earn participation credit by responding to at least one question per class.). Students must be in attendance during the lecture to participate in Top Hat activities.

- Participation in 9-11 classes will be given 4% credit.
- Participation in 6-8 classes will be given 2% credit.
- Participation in 4-5 classes will be given 1% credit.
- Participation in 3 or fewer classes will not receive in-class participation credit.

(CEC #3) Participate in our weekly “HOMEWORK” questions = 4%

Please note: A purchase of our course Top Hat text is required to participate in these activities.

Respond questions distributed within your weekly assigned readings for credit. Students will have up to the Saturday (at midnight) after the lecture to answer questions for credit. Credit will be assigned on the percentage of correct responses.

(CEC #4) Help-a-Peer = 4%

Students who provide an informative, original answer on the Quercus discussion forum in response to another student’s question regarding course material will earn credit for their response. An informative answer is one that correctly and articulately explains a conceptually challenging topic. The answer is original if no similar answer has been provided. Original and informative responses to question will receive 1% toward “Help-a-Peer” CEC.

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/>

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>.

Students are to submit original supporting documentation (e.g., medical certificates, accident reports, etc.) to the Psychology Academic Counselor or drop it in the drop box located outside the Psychology office, Deerfield Hall, 4th Floor. Students have up-to one week from the date of the missed test to submit request. Late submissions will NOT be considered without a letter of explanation specifying and documenting the reasons for the lateness.

Medical certificates or physician's notes must be completed by the Physician and MUST include the statement "This Student [name] was unable to write the test on [date(s)] for medical reasons". This documentation must show that the physician was consulted within one the day of the missed term test. A statement merely acknowledging a report of illness made by the student to the physician is NOT acceptable. For further information on this procedure please see: <http://www.utm.utoronto.ca/psychology/undergraduate-studies/missed-testslate-submissions>

If you missed your test/assignment deadline for a reason connected to your registered disability, please be advised that the department will accept documentation supplied by the UTM AccessAbility Resource Centre.

IMPORTANT: The Department of Psychology verifies the authenticity of medical certificates by contacting medical offices. Students are NOT to make any changes or alteration to completed medical certificates.

Students who submit forged or altered documentation are subject to severe academic penalties.

If your request is approved by the department, the value of the test will be redistributed to the final examination.

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.

Original supporting documentation (e.g., medical certificates, accident reports, etc.) must be submitted to the Psychology Academic Counselor or dropped off in the drop box located outside the Psychology office Deerfield Hall, 4th Floor. Students are expected to submit requests to the Department before the last day of the term, unless demonstrably serious reasons prevent them from doing so. In the event of an illness, medical certificates or doctor's notes must confirm that student was ill on the due date of the assignment (for a one-day extension). For a longer extension, documentation must specify the full duration during which academic work could not be carried out.

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>

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

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/accessibility/>

Academic Honesty and Plagiarism

Honesty and fairness are considered fundamental to the university's mission, and, as a result, all those who violate those principles are dealt with as if they were damaging the integrity of the university itself. When students are suspected of cheating or a similar academic offence, they are typically surprised at how formally and seriously the matter is dealt with -- and how severe the consequences can be if it is determined that cheating did occur. The University of Toronto treats cases of cheating and plagiarism very seriously. Please take the time to review the Academic Integrity website: <http://www.utm.utoronto.ca/academic-integrity/students>.

- Common trends in academic offences:
- Plagiarizing/concocted references
- Collaboration/unauthorized assistance
- Purchasing work
- Recycling work - "double-dipping"
- Resubmitting of altered work for re-grading
- Electronic devices (cell phones) or any unauthorized aids
- Altering medical certificates and UofT documents

From the Code of Behaviour on Academic Matters: "It shall be an offence for a student to knowingly: represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism. Wherever in the Code an offence is described as depending on "knowing", the offence shall likewise be deemed to have been committed if the person ought reasonably to have known." All students must refer to this website to obtain information on what constitutes plagiarism. <http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize>.

If questions arise after reading the material on the website, consult your instructor.

Plagiarism will not be tolerated.

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 or the University of Toronto Mississauga Students' Union Vice President Equity at vpequity@utmsu.ca.

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 25% or more 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.

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.

Course Outline		
Week	Topic	Notes
1 January 8	Introduction to the study of sensory and perceptual processes 1st Assignment introduced	
2 January 15	Measuring Perception: Psychophysics	
3 January 23	Vision: From Light to Sight	
4 January 29	The retina	1st Assignment Due
5 February 5	To the Visual Cortex	
6 February 12	Perceiving detail and objects 2nd Assignment Introduced	
7 February 19	Reading Week	
8 February 26	Mid-term	Test
9 March 4	Perceiving colour	
10 March 11	Perceiving depth and movement	
11 March 18	Skin and Body Senses	
12 March 25	The Chemical Senses	2nd Assignment Due
13 April 1	Hearing and Sound	

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