PSYC*2390, Course Outline: Winter 2026

General Information

Some courses are offered virtually and some face to face. **This course is offered using the Face-to-Face format. The course has set day, time, and location of class.**

Course Title: Sensation and Perception

Course Description:
This course introduces students to the sensory systems including how they work, what can go wrong with them, and how this may impact performance. Approaches ranging from psychophysiology and cognitive psychology to physiology and anatomy will be used. In considering the psychology of sensation and perception, some of the anatomical and physiological aspects of selected senses will be covered in detail and the roles of experience, organization of inputs, and theories of perception are discussed. The focus in this one-semester course will primarily be on vision and hearing, the two senses that we know most about.

Credit Weight: 0.5

Academic Department (or campus): University of Guelph Main Campus

Semester Offering: Winter 2026

Class Schedule and Location: Tuesday and Thursday, 8:30—9:50 AM, ALEX 200

Instructor Information

Instructor Name: Michelle Dollois
Instructor Email: mdollois@uoguelph.ca
Office location and office hours: MCKN Extension 4022. Office hours will be held in-person by the instructor on Tuesdays from 10—11 AM. Extra office hours will be held prior to major tests.

GTA Information

Virtual office hours will be held weekly with GTAs. Date and time will vary week to week and will be announced on CourseLink.

GTA Name: Katherine Churey
GTA Email: kchurey@uoguelph.ca

GTA Name: Jessica Karlovcec
GTA Email: jkarlovc@uoguelph.ca

GTA Name: Nikita Gaikwad
GTA Email: ngaikw01@uoguelph.ca

GTA Name: Gulfidan Tay Yildiz
GTA Email: gtayyild@uoguelph.ca

Course Content

Specific Learning Outcomes:

Critical and Creative Thinking**:**

1. Depth and Breadth of Knowledge
    a. Describe core concepts in sensation and perception
    b. Understand and apply key concepts in sensation and perception
2. Inquiry and Analysis
    a. Ask appropriate questions related to sensation and perception and find relevant evidence
3. Problem Solving
    a. Use information to find ways from sensation and perception to solve practical or creative problems

Literacy:

4. Methodological literacy**:** the ability to understand, evaluate, and apply appropriate methodologies for rigorous psychological science
    a. Recognize and describe basic research methodologies in perception and their relative strengths and limitations
5. Quantitative literacy: the ability interpret numerical data (including formulas)
6. Visual literacy: the ability to effectively interpret images and graphs

Communication:

7. Reading Comprehension (e.g., reading the text materials)
8. Written Communication
    a. Explain complex abstract processes in simple, clear, and jargon-free language
    b. Present ideas in a logical order
    c. Use concrete examples, diagrams, graphs when necessary (see visual literacy).
9. Integrative Communication
    d. Relate concepts in sensation and perception to the other things you know (e.g. personal experiences)

Professional and Ethical Behaviour:

10. Personal organization/ time management
    a. Recognize the importance of planning for completion of tasks
    b. Effectively manage intense time pressures (e.g. prioritize and complete important or urgent tasks, start tasks early)
    c. Demonstrate personal accountability and responsibility

For each of the following objectives of this course, the relevant learning outcome is listed afterwards. On successful completion of this course, students will be able to do the following:

A. Describe the various methodologies used to ask questions about perception (neuropsychological, psychophysical, cognitive; Learning outcomes: 1, 2, 7-9)

B. 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. Interpret the results of graphs and devise tests to measure these abilities in practical situations. (Learning outcomes: 1, 2, 4-9)

C. Interpret formulas, graphs, and tables that present information about perceptual abilities. Interpret circuit-diagrams that display how neurons code information in the brain. (Learning outcomes: 1, 2, 4-7)

D. Describe the psychophysical laws of perception in their own words and explain what they mean in terms of day-to-day performance in simple jargon-free language, using concrete examples of their own creation. Differentiate between perceptual sensitivity and decision processes (response bias) and indicate how each is represented in signal detection theory, using examples from their own experience (Learning outcome: 1, 3, 4-5, 7-9).

E. Describe the processes involved in sensory processes and perception, starting from those involved in changing energy from one form to another (transduction) to interpretation of the information so that it can be used in object recognition and perceptual-motor coordination. Indicate the structures in the body and the brain that are involved in the process and describe what each structure does. Explain the basis of individual differences in perception (Learning outcomes: 1, 7-9)

F. Identify the weak points in the system, that is, places where the senses produce inaccurate information (illusions) that may have impacts on day-to-day performance. Identify instances where this may have an effect on performance or others around you (Learning outcomes: 1, 7-9)

G. Recognize the symptoms of selected perceptual disorders and indicate the effect the disorder has on performance in day-to-day tasks. Identify the disorder, the affected structure, and indicate what can be done to prevent or alleviate the condition. Recognize early signs of perceptual problems in yourself and others. (Learning outcomes: 1, 7-9).

H. Indicate the basis of age-related changes in perception and what this means for performance in daily tasks. Recognize the effects of these age-related changes and their impact on how they perceive the world. (Learning outcomes: 1, 7-9).

I. Apply the principles of perception to solve practical or creative problems. For example, use the pictorial depth cues to give the illusion of depth in a picture, using light mixing to create colours that cannot be mixed in a pallet or designing a toy for a newborn

infant so that the infant will be able to best see it. (Learning outcomes: 1, 3, 7-9).

J. Learn to prioritize so that you can make the best use of your limited time. Taking responsibility of your own work schedule using the study worksheet and optional quizzes to help ensure the best possible grade in the course. Students will learn strategies to organize and plan their work across the term in conjunction with other courses and responsibilities. Specifically they will learn time management skills to ensure that quizzes and worksheets are completed in a timely manner so that they can be beneficial for the corresponding exam (Learning outcome: 10).

Lecture Content:

Note: The table below lists the content of the lectures and the associated readings from the text. Every effort will be made to adhere to this schedule as closely as possible. Exam and quiz dates will not change, however some topics may take more or less time to cover in a given term. Announcements on CourseLink will contain the most up to date information with respect to readings and material required for a given exam should we need to deviate from the content schedule below.

Date	**Content**	**Goldstein text readings**	**Assessments and coursework**
Jan 6, 8	Introduction to Perception	Chapter 1, Appendices A-C	Quiz 1 opens Fri 10:00 AM
Jan 13, 15	Basic Principles of Sensory Physiology The Eye and the Retina	Chapter 2 Chapter 3	Quiz 1 closes Mon 11:59 PM Quiz 2 opens Fri 10:00 AM
Jan 20, 22	The Eye and the Retina	Chapter 3	Quiz 2 closes Mon 11:59 PM Quiz 3 opens Fri 10:00 AM
Jan 27, 29	The Visual Cortex and Beyond	Chapter 4	Quiz 3 closes Mon 11:59 PM **Exam 1 Tues 8:30 AM** Quiz 4 opens Fri 10:00 AM
Feb 3, 5	The Visual Cortex and Beyond Perceiving Objects and Scenes	Chapter 4 Chapter 5	Quiz 4 closes Mon 11:59 PM Quiz 5 opens Fri 10:00 AM
Feb 10, 12	Perceiving Objects and Scenes	Chapter 5	Quiz 5 closes Mon 11:59 PM Quiz 6 opens Fri 10:00 AM
Feb 16—20	**Winter Break – no classes this week.**		
Feb 24, 26	Perceiving Motion	Chapter 8	Quiz 6 closes Mon 11:59 PM **Exam 2 Tues 8:30 AM** Quiz 7 opens Fri 10:00 AM

Mar 3, 5	Perceiving Colour	Chapter 9	Quiz 7 closes Mon 11:59 PM Quiz 8 opens Fri 10:00 AM
Mar 10, 12	Perceiving Depth and Size	Chapter 10	Quiz 8 closes Mon 11:59 PM Quiz 9 opens Fri 10:00 AM
Mar 17, 19	Hearing	Chapter 11	Quiz 9 closes Mon 11:59 PM **Exam 3 Tues 8:30 AM** Quiz 10 opens Fri 10:00 AM
Mar 24, 26	Hearing	Chapter 11	Quiz 10 closes Mon 11:59 PM Quiz 11 opens Fri 10:00 AM
Mar 31, Apr 2	Chemical Senses or Cutaneous Senses (determined by class vote)	Chemical: Chapter 16 Cutaneous: Chapter 15	Quiz 11 closes Mon 11:59 PM Quiz 12 opens Fri 10:00 AM

Labs:

None

Seminars:

None

Course Assignments and Tests:

Assessment	**Due Date**	**Contribution to Final Mark (%)**	**Learning Outcomes Assessed**
Weekly quizzes	Weekly on Mondays at 11:59 PM	15% based on best 10 of 12 quizzes (1.5% per counted quiz)	1-6, 10
Midterms (in class)	Exam 1: Jan 27 Exam 2: Feb 24 Exam 3: Mar 17	50% based on average of best 2 of 3 tests	1-8, 10
Cumulative Final Exam	Tuesday, April 21, 7—9 PM. Location will be announced closer to exam date.	35%	1-8, 10

Additional Notes (if required):

1. There are a total of 12 quizzes. You may drop/miss two quizzes. The remaining 10 quizzes are worth 1.5% of your mark each. Weekly quizzes will be completed online through CourseLink. Quizzes are not cumulative, and students can use lecture notes, textbooks, etc. to complete each quiz. Each quiz will be available for completion starting

Fridays at 10:00 AM and must be finished/submitted by the following Monday evening at 11:59 PM. **There are no make-up quizzes**.

2. There are a total of 3 midterms. Midterm exams will be held in person during regular class time in the regular class location. Midterms will be comprised of multiple choice and long answer questions. They are non-cumulative and closed-book. Some midterms may require a simple calculator. Only the best 2 midterms will count towards the final grade, each being worth 25% (50% total). The dropped midterm safeguards students against missing a test due to illness, unforeseen circumstances, or scheduling conflicts. As such make-up exams will only be held under extreme circumstances when multiple midterms are missed.
3. The final exam will be held in-person during the exam period. It will be comprised of multiple-choice questions and will be cumulative. The final exam may require a simple calculator.

Final examination date and time:
Tuesday April 21, 7:00-9:00 PM

Final exam weighting:
35%

Final exam regulations can be found here: Examination Regulations.

Course Resources

Required Texts:

Goldstein, & Cacciamani (2022). Sensation and Perception. Custom Edition (4th edition).

Multiple versions are available through the campus bookstore:

Version	Edition	ISBN	Price
Physical custom edition	4th	978-1-774-74187-0	$95.95
Digital custom edition	4th	978-1-774-74972-2	$79.95
USED Physical full edition	11th	978-0-357-44647-8	$127.50
NEW Physical full edition	11th	978-0-357-44647-8	$169.95

A custom version of the text has been created especially for this class to reduce costs for students. The custom version of the text contains only the chapters that we will cover in our course (the full text was designed for a full-year course).

Library Course Reserve (Ares)
A physical AND digital copy of the course textbook have been placed on reserve at the Library.

For further instructions on accessing reserve resources, visit: Course Reserves

If at any point during the course you have difficulty accessing reserve materials, follow the Contact us link at the bottom of the page linked above or visit: Course Reserve Questions

Other Resources:

Live in-class polling may be used during lectures for demonstrations and to gage understanding. Online interactive experiment demonstrations may be made available for engagement outside of class. Any use of additional resources will be optional and come at no extra cost to students.

Additional Costs:

Students may wish to purchase a simple calculator for this course. There will be simple math on at least one test for this course. Math-based questions will be designed with the intention that they can be completed without a calculator, but simple calculators will be permitted. Students will be given examples prior to testing so that they can judge their needs appropriately.

Course Policies

Grading Policies
Weekly quizzes: Only the first attempt of quizzes will count towards a student's grade. Any late submissions will be automatically marked as 0. There will be no make-up quizzes for missed deadlines. The two lowest scoring quizzes will be dropped from the final grade.

Midterms: The lowest scoring midterm will be dropped from the final grade. Make-up exams will only be held for students who miss more than one midterm. The instructor must be informed no later than 48 hours after a missed exam to coordinate a make-up exam. Make-up exam times and locations will be determined by the instructor and are non-negotiable.

Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

University Policies

Disclaimer:
Please note that a revision of the format of course offerings, changes in classroom protocols, and academic schedules is occasionally required. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules.

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:
Academic Consideration, Appeals and Petitions

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:
Academic Misconduct Policy

Illness
Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the Student Accessibility Services Website

Student Feedback Questionnaire

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courselink, a reminder will pop-up when a task is available to complete.
Student Feedback Questionnaire

Drop date

The last date to drop one-semester courses, without academic penalty, is Monday April 6th 2026. For regulations and procedures for Dropping Courses, see the Schedule of Dates in the Academic Calendar.

Instructors must provide meaningful and constructive feedback, at minimum 20% of the final course grade, prior to the 40th class day. For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.

Current Undergraduate Calendar