# PSYC\*2390, Course Outline: Winter 2021

## **General Information**

DUE to the ongoing COVID-19 pandemic, this course is offered in an alternative format. Alternative Delivery Synchronous – AD-S Virtual: Tuesday and Thursday 2.30 – 3.50 pm

## Course Title: Sensation and Perception

#### **Course Description:**

This course introduces fundamental ideas about how it is that we come to know about the world through our physical senses (e.g. eyes and ears). The course begins with a discussion about the relationship between sensation and perception, and how perception is measured. It continues by discussing the various physiological mechanisms involved in perception, including perceptual illusions, perceptual anomalies and deficits. The focus of this one semester course will be on vision and hearing as these are the two sensory modalities we know most about.

Credit Weight: 0.5

Academic Department (or campus): Psychology

Semester Offering: Winter 2021

**Class Schedule and Location:** Alternate synchronous delivery, using Zoom though University of Guelph's CourseLink system. Tuesdays and Thursdays 2.30 – 3.50 pm. Recordings of the lectures will be made available on the course website for review.

## **Instructor Information**

Instructor Name: Heather Jordan, PhD Instructor Email: JordanH@uoguelph.ca Office location and office hours: After class on Zoom or Monday 11.30 am – 12.30 pm via <u>Zoom</u> <u>link (https://zoom.us/j/99949648934?pwd=ZEt2WGk1b1ICb0RYNHIsMWpCNk85UT09</u>)

I encourage you to ask questions about the course content and about the exam. However, please ask these questions either **during class or after class.** If you would like to have a one-on-one conversation, please see me **during my office hours**.

My email is for urgent communications only (e.g., unexpected circumstances that arise the day of a test). Short questions should be posted to the discussion board on CourseLink, which is checked by me daily M-F. Long, or private, questions should be brought to my office hours.

## **GTA Information**

GTA Name and Email: Christine Sexton <u>csexton@uoguelph.ca</u> Rachel Eng <u>engr@uoguelph.ca</u> Niyatee Narkar nnarkar@uoguelph.ca

GTA office location and office hours: see schedule on CourseLink or contact a specific GTA by email for an appointment.

The main role of the GTAs is to help the students in this course. They are available to go through any material that students are finding challenging, and provide help and advice with study skills including note-taking and time management.

## **Course Content**

## Specific learning outcomes

1. Key Terms, Concepts and Principles - Depth and breadth of knowledge

- Describe core concepts in sensation and perception.

2. Documentation and Communication Skills

Develop reading and listening comprehension skills by identifying the key points in real time and summarising them, clearly and concisely, so you can later access the information.
Explain complex abstract process is in clear, simple, jargon free language, presenting ideas in a logical order, using concrete examples and diagrams, graphs when necessary (see also visual literacy).

3. Knowledge Translation

- Relate concepts in sensation and perception to other things you know, including your own personal experiences

- Understand and apply key concepts in sensation and perception to solve practical or creative problems.

4. Methodological literacy: the ability to understand, evaluate, and apply appropriate methodologies for rigorous psychological science.

- Recognize and describe basic research methodologies in perception and relative strengths and limitations.

5. Quantitative literacy: the ability to interpret numerical data including formulas and Visual literacy: the ability to effectively interpret, evaluate, use, and create images and graphs.

- Develop the ability to comprehend quantitative information presented in numerical or visual form.

6. Critical Thinking

- Reflect on and evaluate information from an alternative point of view, or identify theories

which provide an alternative explanation, or an opposing interpretation, of empirical data. - Reflect on what is known and understood about sensation and perception, and where knowledge gaps still lie.

Upon successful completion of this course, student should be able to do the following:

A Describe the various methodological methodologies used to ask questions about perception (neuropsychological, psychological and cognitive) *Learning outcomes: 1-4* 

B Use the classic techniques of psychophysics and signal detection to measure perceptual sensitivity and discrimination and present the data in the form of tables or graphs. Interpret the results of graphs and devised tests to measure these abilities in practical situations. *Learning outcomes: 1-5* 

C. Describe the psychophysical laws of perception in their own words and relate them to dayto-day performance using concrete examples of your own creation. Differentiate between perceptual sensitivity and decision processes (response bias) and indicate how each is represented in signal detection theory, using examples from your own experience. *Learning outcome: 1-4* 

D. Describe the mechanisms 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 these processes and describe what each structure does. Explain the basis of individual differences in perception learning outcomes: 1-5

E Identify why the senses produce inaccurate information (illusions) that may have impacts on day-to-day performance. Identify instances where this may influence your performance or others around you. *Learning outcomes 1, 3, 6* 

F Recognize the symptoms of selected perceptual disorders and indicate the effects the disorder has on performance in day-to-day tasks. Students will identify the disorder and the affected structure and indicate what can be done to prevent or alleviate the condition. Learn to recognize early signs of problems in yourself and others. *Learning outcomes 1, 3* 

G Understand the basis of age-related changes in perception and the implications for performance in day-to-day tasks. Recognize the effects of these age-related changes on how yourself and others perceive the world. *Learning outcomes 1, 3* 

#### Lecture Content:

Date	Content	Goldstein & Brockmole (10 <sup>th</sup> edition) Text	
Tuesday Jan 12 <sup>th</sup>	Introduction to Perception	Chapter 1	
Thursday Jan 14 <sup>th</sup>	Review: Neural basis of	Chapter 2	
	Perception		
Tuesday Jan 19 <sup>th</sup>	The Beginning of Perception	Chapter 2	
Thursday Jan. 21st			
Tuesday Jan 26 <sup>th</sup>	Measuring Perception	Chapter 1 and Appendix A –	
		D	
Thursday Jan. 28th	EXAM 1 (all material to this		
	point)		
Tuesday Feb 2 <sup>nd</sup>	Neural Processing	Chapter 3	
Thursday Feb 4 <sup>th</sup>			
Tuesday Feb 9 <sup>th</sup>	Cortical Organisation	Chapter 4	
Thursday Feb 11 <sup>th</sup>			
Tuesday Feb 16 <sup>th</sup>	READING WEEK – NO		
Thursday Feb 18th	CLASSES		
Tuesday Feb 23rd	Colour Vision	Chapter 9	
Thursday Feb 25th			
Tuesday Mar 2nd	Perceiving Depth and Size	Chapter 10	
Thursday Mar 4th			
Tuesday Mar 9 <sup>th</sup>	Perceiving Depth and Size	Chapter 10	
Thursday Mar 11th	EXAM 2 (all material since	Chapters 3, 4, 9 and 10	
	Exam 1)		
Tuesday Mar 16 <sup>th</sup>	Perceiving Objects and	Chapter 5	
Thursday Mar 18th	Scenes		
Tuesday Mar 23rd	Attention	Chapter 6	
Thursday Mar 25th	Motion	Chapter 8	
Tuesday Mar 30 <sup>th</sup>	Hearing	Chapter 11	
Thursday April 1st			
Tuesday April 6 <sup>th</sup>	Auditory Localization	Chapter 12	
Thursday April 8th			
Final Exam:	EXAM 3 (all material since	Chapters 5, 6, 8, 11 and 12	
April 26, 2021 – 2:30-4:30pm	exam 2, and Measuring	and Appendices A-D	
	Perception		

Labs: None Seminars: None

#### **Course Assignments and Tests:**

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Midterm Exam 1	Thurs. 28 <sup>th</sup> Jan.	20%	1-6
Midterm Exam 2	Thurs. 11 <sup>th</sup> March	30%	1-6
Final Exam 3	TBD	35%	1-6
MindTap Mastery	Monday of the	10%	1 - 6
Activity	following week		
Homework Quizzes	Monday of the	5%	1, 3, 4
Best 10 of 12	following week		

## Additional Notes (if required):

#### **MISSED EVALUATIONS.**

**Midterm**. If a student misses a midterm exam, they must notify the instructor immediately by email and the midterm may be rescheduled to take place on Friday afternoon of the same week. If that is not possible, then the final exam will count toward 55% or 65% of the final grade. This change will be implemented when final grades are submitted and will not be reflected on CourseLink. No student will be allowed to substitute more than one midterm exam.

Requests of changes to the above policy will be considered only in exceptional circumstances. If granted, the % value of one missed midterm can be substituted by an optional essay (20-25 pages, double-space, APA style; see Instructor for details). This essay will have to be submitted by email to jordanH@uoGuelph.ca before 5:00 PM on the last day of class of the course. The deadline of this optional essay is not negotiable; late submissions will not be accepted.

**Final exam**. Students who do not write the final exam must follow the University's procedures for requesting academic consideration (see below). <u>Undergraduate Grading Procedures.</u>

#### Final examination date and time: April 26<sup>th</sup>, 2021, 2:30-4:30pm

Final exam weighting: 35%

## **Course Resources**

#### **Required Texts:**

Goldstein, E.B. and Brockmole, J. (2016) Sensation & Perception: Mindtap w/eBook (10th edition) Wadsworth Publishing. ISBN 1305865243

All the <u>information you need about access this book and resource</u>s is available here: <u>https://www.cengage.com/coursepages/UGuelph\_W21\_PSYC2390</u>

Lab Manual:

None

#### **Other Resources:**

The MindTap website contains a myriad of resources and demonstrations that you should use to enhance your learning this term. Specific activities will be highlighted as we go through the course. In addition, you need plan to complete the Mastery activity for each chapter which takes approximately 20 minutes and is worth up to 10% of your final grade.

Field Trips: none Additional Costs: none

## **Course Policies**

#### **Grading Policies**

#### Undergraduate Grading Procedures

Students may request that a GTA or Instructor review their exam with them at office hours. Note that the student must accept the re-grade, whether it be lower or higher.

#### **Course Policy on Group Work:**

There is no formal group work in this course. Students are explicitly forbidden from communicating with one another during exams.

#### **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. Similarly, any material created by the course instructor is intended for those enrolled in this course solely. Under no circumstances are you allowed to disseminate course materials to external parties.

## Student Rights and Responsibilities when Learning Online

#### Privacy Rights

Lectures held via Zoom may be recorded for the purpose of making them available to the class for review or for those students who were unable to attend the class synchronously. As a

student, you have the right to protect your privacy online and may choose to turn off your video and/or audio when in session. In the event that your video and/or audio remain on, please note that you are consenting to your presence in lecture recordings. Under no circumstances are you permitted to transmit copies of the recordings to others, without the express written consent of the instructor.

## **Recording of Lecture Materials**

The University of Guelph's primary mode of course delivery has shifted from face-to-face instruction to remote and online learning due to the ongoing COVID-19 pandemic. As a result, some learning activities (e.g., synchronous lectures or student presentations) may be recorded by faculty, instructors and TAs and posted to CourseLink for grading and dissemination; students may be recorded during these sessions.

The following statements may be added to the course outline and it is recommended these are discussed in any synchronous courses during the first week of classes.

By enrolling in a course, unless explicitly stated and brought forward to their instructor, it is assumed that students agree to the possibility of being recorded during lecture, seminar or other "live" course activities, whether delivery is in-class or online/remote.

If a student prefers not to be distinguishable during a recording, they may:

- 1. turn off their camera
- 2. mute their microphone
- 3. edit their name (e.g., initials only) upon entry to each session
- 4. use the chat function to pose questions.

Students who express to their instructor that they, or a reference to their name or person, do not wish to be recorded may discuss possible alternatives or accommodations with their instructor.

## Online behaviour

According to the University Secretariat, students have a responsibility to help support community members' access to the tools they need to engage in their learning and development, both in and outside of the classroom. An example of this type of responsibility is the requirement to abide by the following:

Section 4.3.3. Disruption - to not interfere with the normal functioning of the University, nor to intimidate, interfere with, threaten or otherwise obstruct any activity organized by the University, including classes, or to hinder other members of the University community from being able to carry on their legitimate activities, including their ability to speak or associate with others.

As such, appropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your username and password

## **University Policies**

**Disclaimer:** Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website and circulated by email.

#### Illness

The University will not normally require verification of illness (doctor's notes) for Fall 2020 or Winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.

## **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

#### 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 <u>Student Accessibility Services</u> as soon as possible.

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

## **Course Evaluation Information**

Please refer to the Course and Instructor Evaluation Website .

## Drop date

The last date to drop one-semester courses, without academic penalty, is April 12, 2021 . For regulations and procedures for Dropping Courses, see the <u>Schedule of Dates in the Academic</u> <u>Calendar</u>.

Instructors must provide <u>meaningful and constructive feedback</u>, at <u>minimum 20% of the final</u> <u>course grade</u>, <u>prior to the 40th class day</u>. 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

## **Additional Course Information**

Students are expected to complete all evaluation individually, regardless of whether they share living space with other students in the class.

Success on the evaluation components of this course requires only material presented during a lecture or in the required reading. Marks will not be awarded for answers on the basis that the information is on the internet so it must be correct. All exams are "closed book" and students

who do use information from any external source during an exam will be in breach of Academic Integrity and can expect to find themselves involved in Academic Misconduct proceedings.

Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. 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.

In this course, your instructor may use Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of Social and Applied Human Sciences.