

# PSYCH 367

## PERCEPTION

Fall, 2023

LEC A1 MWF 1:00-1:50p.m. CCIS 1-140

**Instructor:** Dr. Karsten A. Loepelmann (he/him)

**Email:** [kloepelm@ualberta.ca](mailto:kloepelm@ualberta.ca)

**Office:** BS P231

**Hours:** Tues. 11:00-12:00 or by appointment

**Class Website:** <https://sites.ualberta.ca/~kloepelm/psych367/>

**TA:** Saja Al-Smadi (she/her)

**Email:** [alsmadi@ualberta.ca](mailto:alsmadi@ualberta.ca)

**Office:** BS P443

**Hours:** by appointment

### Prerequisites

The prerequisites for this course are PSYCH 275 or 258; **no** exceptions or waivers. You may **not** take this course for credit if you have credit in PSYCH 267. See [UAlberta Calendar](#) section University Regulations: Registration: [Prerequisite Course Requirements](#).

### Course Objectives & Learning Outcomes

How do we sense stimuli in the world around us, and how does that lead to perception in our minds? This course is an introduction to theoretical and experimental issues about our sensory and perceptual experience of the world. You will understand basic perceptual phenomena, such as the relation between physical stimuli and experience. To do so, you will learn to consider the nature of the physical stimuli, as described by physics; the anatomy and physiology of the sense organs and receptors; the neural paths from the receptors to the brain; how the brain processes sensory information; and attentional processes. You will examine basic and applied issues in the modalities of vision, audition, olfaction, gustation, and the cutaneous senses; as well as psychophysical and other methods. Specific learning outcomes will be described in lectures for each topic, and in the Online Labs document.

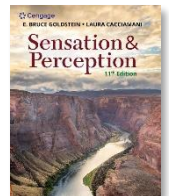
### Required Textbook & Readings

**Textbook** (available to buy at the Bookstore; limited copies available [on reserve](#) at the UAlberta Library): Goldstein, E. B., & Cacciamani, L. (2022). *Sensation and perception* (11th ed.). Cengage Learning, Inc.

**Required readings** (posted on eClass):

Ramachandran, V. S., & Hubbard, E. M. (2003). Hearing colors, tasting shapes. *Scientific American*, 288(5), 53-59. <https://doi.org/10.1038/scientificamerican0503-52>

Weinberger, N. M. (2004). Music and the brain. *Scientific American*, 291(5), 88-95. <https://doi.org/10.1038/scientificamerican1104-88>



### Assessment

**ePoll Participation (worth 5%):** You earn marks by participating in ePolls in class (not according to how many questions you answer correctly). There are 15 polls; each poll is worth 0.33333333% (i.e., 5%/15). The weight of any missed polls will be automatically added to your final exam. To use [ePoll](#), you must have an internet-connected device (e.g., laptop, tablet, phone).



**Online Labs (worth 15%):** The online labs are a hands-on experience that relates research findings to theoretical concepts, which will develop your scientific research, data visualization, digital literacy, and written communication skills. You must do the online lab experiments, and submit your results and answers to questions about the lab via eClass. More information (including due dates) is in the [Online Labs document](#).

**Midterm Exams (worth 25% each):** The two midterms assess understanding of material covered in the assigned readings and lectures. Although there is much overlap between the textbook and lectures, it is not a complete overlap; some content is only covered in one or the other. You are responsible for **all** material. The midterms consist of multiple-choice questions. Midterms will not be handed back in class; the TA will hold exam viewings. If you miss a midterm for an acceptable reason such as incapacitating illness or severe domestic affliction, then the weight of the excused exam will be added to the final exam (you must complete this [statutory declaration form](#)). Documentation must be provided within **two** working days of the missed exam. **No** makeup exams or assignments are accepted. See *Calendar* sections Academic Regulations: [Attendance](#) and [Examinations \(Exams\)](#).

**Final Exam (worth 30%):** See the Office of the Registrar’s [exam schedule](#) for official date and time. The 2-hour final exam will be cumulative; it will have multiple-choice questions based on the entire course, with an emphasis on the material covered after the second midterm. If you miss this exam, you must apply to your Faculty Office for a deferral of the final exam within **two** working days of the final exam date. See *Calendar* sections Academic Regulations: [Attendance](#) and [Final Examinations](#).

## Grading

Final grades will be assigned based on the University of Alberta letter grading system. This grade translation is approximate; the instructor reserves the right to use expert judgment to adjust the grades as necessary.

<b>A+</b> = 89-100%	<b>B+</b> = 75-80%	<b>C+</b> = 62-65%	<b>D+</b> = 45-52%
<b>A</b> = 85-88%	<b>B</b> = 70-74%	<b>C</b> = 57-61%	<b>D</b> = 40-44%
<b>A-</b> = 81-84%	<b>B-</b> = 66-69%	<b>C-</b> = 53-56%	<b>F</b> = 0-39%

## Schedule of Classes (\* indicates Online Lab due date)

<b>Date:</b>	<b>Topic:</b>	<b>Assigned readings:</b>	<b>Online Lab due:</b>
Sept 6-8	Introduction to the course Introduction to perception	Chapter 1	
Sept 11-15	Psychophysical methods & Signal Detection Theory	Appendixes A, B, & C	
Sept <b>18*</b> -22	Early visual processing; Neural processing in vision	Chapters 2 & 3	#1: Signal Detection
Sept 25-29	The visual brain	Chapter 4	
Oct <b>2*</b> -6	Visual attention	Chapter 6	#2: Blind Spot
Oct 9-13	<b>No class (Thanksgiving Day): Mon., October 9</b> Object perception <b>Midterm 1: Friday, October 13</b>	Chapter 5 <b>(Chs. 1-4 &amp; 6, &amp; Apps. A-C)</b>	
Oct <b>16*</b> -20	Object perception cont’d; Perception and action	Chapters 5 & 7	#3: Visual Search
Oct 23-27	Motion perception; Colour perception	Chapters 8 & 9	
Oct <b>30*</b> -Nov 3	Depth perception	Chapter 10	#4: Müller-Lyer Illusion
Nov 6- <b>10*</b>	Size perception <b>Midterm 2: Wednesday, November 8</b> Hearing	Chapter 10 cont’d <b>(Chs. 5 &amp; 7-10)</b> Chapter 11	#5: Size Constancy
Nov 13-17	<b>No classes (Fall Term Reading Week)</b>		
Nov <b>20*</b> -24	Hearing cont’d; Complex sound perception	Chapters 11 & 12, Weinberger (2004)	#6: Frequency Response
Nov 27-Dec 1	The cutaneous senses; Synesthesia	Chapter 15; Ramachandran and Hubbard (2003)	
Dec <b>4*</b> -8	The chemical senses	Chapter 16	#7: Perfect Pitch

The final exam is scheduled for **Thursday, December 14, 2023** at **2:00p.m.** in **CCIS 1-140**.

You must verify this date on [Bear Tracks](#) when the final exam schedule is posted.

(Deferred final exam is scheduled for Friday, January 5, 2024 at 10:00a.m. in BS P231.)

## The Fine Print

### Academic Integrity

The University of Alberta is committed to the highest standards of [academic integrity](#) and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the [Code of Student Behaviour](#) (and the [Student Conduct Policy](#)) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All forms of dishonesty are unacceptable at the University. Any offence will be reported to the College of Natural and Applied Sciences; they will determine the disciplinary action to be taken. Cheating, plagiarism and misrepresentation of facts are serious offences. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. As well, in the Faculty of Science the sanction for cheating on any examination will include a disciplinary failing grade (no exceptions) and senior students should expect a period of suspension or expulsion from the University of Alberta.

Unauthorized content generation is the production of academic work, in whole or part, for academic credit, progression, or award, whether or not a payment or other favour is involved, using unapproved or undeclared human or technological assistance. In other words, using AI (e.g., large-language models like ChatGPT) is a form of academic dishonesty and a violation of academic integrity.

### Privacy Policies

If you choose to use [MindTap](#), be aware that: a) you are subject to [Cengage Learning, Inc.](#)'s privacy policies, and that b) your information may be held outside of Canada, and may be subject to another country's laws. To complete the labs and use the Online Psychology Laboratory, you will have to create an account and agree to the terms of the [APA privacy policy](#).

### Support Services & Accommodations

Students who need additional help in developing strategies for better time management, study skills, or examination skills should contact the [Academic Success Centre](#).

In accordance with the University of Alberta's [Discrimination, Harassment, and Duty to Accommodate Policy](#), accommodation support is available to eligible students who encounter limitations or restrictions to their ability to perform the daily activities necessary to pursue studies at a post-secondary level. Students have both rights and responsibilities with regard to accommodations. Adherence to procedures and due dates is required for the University to provide accommodations. Contact [Accessibility + Accommodations Services](#) for further information.

When an assessment presents a conflict based on [non-medical protected grounds](#), students must [register for accommodations](#) with the Academic Success Centre.

A student who cannot write the final examination due to incapacitating illness, severe domestic affliction or other compelling reasons can apply for a deferred final examination. An application must be made to the student's Faculty office within two working days of the missed examination and must be supported by appropriate documentation or a Statutory Declaration (see UAlberta *Calendar* section Academic Regulations: [Absence from Final Exams](#)).

In cases of temporary conditions that hamper your ability to complete an assignment or write an exam (e.g., a broken arm), the Office of Universal Design and Accessibility Facilitation can help determine what temporary accommodations are required. To request assistance in such cases, contact the Dean of Students Office at [doshelp@ualberta.ca](mailto:doshelp@ualberta.ca).

Deferral of exams or term work is a privilege and not a right; there is no guarantee that a deferral will be granted. Misrepresentation of facts to gain a deferral is a serious breach of the Code of Student Behaviour.

### Term Work Policy

With the exception of term work for which students did not receive feedback before the posting of final grades, students must initiate a request for reevaluation of term work with the instructor prior to the day of the final exam.

Representative evaluative course material (e.g., practice and review questions) is available in the textbook and on eClass.

### Recording Permissions Policy

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the [prior written consent](#) of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course (e.g., lecture notes) is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

### Other Policies

The [Office of Safe Disclosure and Human Rights](#) (OSDHR) provides confidential disclosure services as well as advising and consulting on any issue relating to human rights, discrimination, harassment, and accommodation issues. There are several ways to contact them, including anonymous options.

Any typographical errors in this Course Outline are subject to change and will be announced in class. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this syllabus.

Policy about course outlines can be found in Academic Regulations: [Course Requirements, Evaluation Procedures and Grading](#) of the University *Calendar*.