**Instructor:** Dr. Karsten A. Loepelmann  
**Email:** kloepelm@ualberta.ca  
**Class Website:** [https://sites.ualberta.ca/~kloepelm/367/](https://sites.ualberta.ca/~kloepelm/367/)

**TA:** Arturo Perez  
**Email:** aiperez@ualberta.ca

**Prerequisites**
The required prerequisites for this course are PSYCO 275 or 258; no exceptions or waivers. You may not take this course for credit if you have credit in PSYCO 267. See [UAlberta Calendar](https://www.ualberta.ca/) section Registration: [Prerequisite Course Requirements](https://www.ualberta.ca/)

**Course Description & Learning Objectives**
This course is an introduction to theoretical and experimental issues about our sensory and perceptual experience of the world. The main emphasis is on understanding basic perceptual phenomena, such as the relation between physical stimuli and experience. To this end, we must 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. Basic and applied issues are examined in the modalities of vision, audition, olfaction, gustation, and the cutaneous senses; psychophysical and other methods are also described. Specific learning outcomes will be described in lectures for each topic.

**Assessment**

**eClass Lecture Quizzes (worth 5%):** Quizzes will be posted on eClass for each lecture topic. Marks are based on participation, not according to how many questions you answer correctly. There are 15 quizzes; each quiz is worth 0.33333333% (i.e., 5%/15). The weight of any missed quizzes will be automatically added to your final exam.

**Online Labs (worth 10%):** The online lab assignments are intended to be a hands-on experience that relates research findings to theoretical concepts. You are required to 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](https://www.ualberta.ca/).

**Proctoring Trial (bonus 1%):** A proctoring trial will be given via eClass so that you can try out the exam integrity and proctoring software. You will receive 1% toward your final grade if you participate in this practice test before the due date; your mark will not be based on how many questions you answer correctly.

**Midterm Exams (worth 25% each):** The two online midterms will test 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 will consist of multiple-choice questions. Midterms will not be available for review. If you miss a midterm for an acceptable reason such as incapacitating illness, severe domestic affliction, or religious conviction (see The Fine Print below), then the weight of the excused exam will be added to the final exam (digitally signed [statutory declaration form](https://www.ualberta.ca/) required). Documentation must be provided within two working days of the missed exam. No makeup exams or assignments are accepted. See [UAlberta Calendar](https://www.ualberta.ca/) sections Academic Regulations: [Attendance](https://www.ualberta.ca/) and [Examinations (Exams)](https://www.ualberta.ca/). Exams require the use of exam integrity and proctoring software, as well as a compatible computer with webcam and microphone. See Remote Teaching Appendix below for more information.
Cumulative Final Exam (worth 35%): See the Office of the Registrar’s exam schedule for official date and time. The 2-hour online 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 Alberta Calendar sections Academic Regulations: Attendance and Final Examinations. (See The Fine Print below for more about this exam.) Exams require the use of exam integrity and proctoring software, as well as a compatible computer with webcam and microphone. See Remote Teaching Appendix below for more information.

Grading
Final grades in this course 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.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>89-100%</td>
</tr>
<tr>
<td>A</td>
<td>86-88%</td>
</tr>
<tr>
<td>A-</td>
<td>81-85%</td>
</tr>
<tr>
<td>B+</td>
<td>75-80%</td>
</tr>
<tr>
<td>B</td>
<td>70-74%</td>
</tr>
<tr>
<td>B-</td>
<td>67-69%</td>
</tr>
<tr>
<td>C+</td>
<td>62-66%</td>
</tr>
<tr>
<td>C</td>
<td>57-61%</td>
</tr>
<tr>
<td>C-</td>
<td>53-56%</td>
</tr>
<tr>
<td>D+</td>
<td>45-52%</td>
</tr>
<tr>
<td>D</td>
<td>40-44%</td>
</tr>
<tr>
<td>D-</td>
<td>39%</td>
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</tbody>
</table>

Required Textbook/Materials
This loose-leaf edition includes the optional Cengage MindTap® online learning resources. The textbook is also available in hardcover and as an ebook.

Outline of Classes (* indicates Online Lab due date)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assigned Readings:</th>
<th>Lab Due:</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 10-14*</td>
<td>Introduction to perception; Psychophysical methods and Signal Detection Theory Early visual processing</td>
<td>Chapter 1 Appendixes A, B, C, D Chapter 2</td>
<td>#1 (May 14)</td>
</tr>
<tr>
<td>May 17-21*</td>
<td>Neural processing in vision Proctoring Trial due: Tuesday, May 18 The visual brain Visual attention</td>
<td>Chapter 3</td>
<td>#2 (May 21)</td>
</tr>
<tr>
<td>May 24-28*</td>
<td>No class (Victoria Day): Mon., May 24 Midterm 1: Tuesday, May 25 Object perception Perception and action</td>
<td>Chapter 6 cont’d (Chs. 1-4 &amp; 6, &amp; Apps. A-D) Chapter 5 Chapter 7</td>
<td>#3 (May 28)</td>
</tr>
<tr>
<td>May 31-June 4</td>
<td>No classes (Congress 2021)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 7-11*</td>
<td>Motion perception Colour perception Depth &amp; size perception</td>
<td>Chapter 8 Chapter 9 Chapter 10</td>
<td>#4 (June 11)</td>
</tr>
<tr>
<td>June 14-18*</td>
<td>Midterm 2: Monday, June 14 Sound, the auditory system &amp; pitch Sound localization &amp; auditory scene</td>
<td>Chapter 11 Chapter 12</td>
<td>#5 (June 18)</td>
</tr>
<tr>
<td>June 21-23</td>
<td>The cutaneous senses; Synesthesia The chemical senses</td>
<td>Chapter 14; Ramachandran &amp; Hubbard (2003) Chapter 15</td>
<td></td>
</tr>
</tbody>
</table>

As per the exam schedule, the final exam is scheduled for Thursday, June 24, 2021 at 3:00 p.m. online. You must verify this date on Bear Tracks when the final exam schedule is posted. (Deferred final exam will be held Monday, June 28, 2021 at 10:00 a.m. online.)
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 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 Associate Dean of Science who 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.

Privacy Policy

If you choose to use MindTap, be aware that: a) you are subject to Cengage Learning’s privacy policies, and that b) your information may be held outside of Canada, and may be subject to another country’s laws.

Absences from Examinations

For an excused absence where the cause is religious belief, a student must contact the instructor(s) within two weeks of the start of Fall or Winter classes (within three days of the start of Spring or Summer classes) to request accommodation for the term (including the final exam, where relevant). Instructors may request adequate documentation to substantiate the student request.

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. Students who failed at the start of term to request exam accommodations for religious beliefs are expected to follow the normal deferred final examination process. Such 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 U of A’s privacy policies, including Accessibility Resources’ deadlines and procedures’ privacy policies, for further information).

Deferred examinations are a privilege and not a right; there is no guarantee that a deferred examination will be granted. Misrepresentation of Facts to gain a deferred examination 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 or in the case of courses without final exams, before the posting of final grades.

Representative evaluative course material (e.g., multiple choice review questions) are available on eClass.

Support Services

Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Academic Success Centre.

Students registered with Accessibility Resources have both rights and responsibilities with regard to accessibility-related accommodations. Consequently, scheduling exam accommodations in accordance with Accessibility Resources’ deadlines and procedures is essential. Please note adherence to procedures and deadlines is required for U of A to provide accommodations. Contact Accessibility Resources for further information.

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).

Reexamination

Reexamination is not permitted in a course in which a passing grade was achieved. A student who writes the final examination and fails the course may apply for a reexamination. Reexaminations are rarely granted. Reexaminations are governed by Calendar sections Academic Regulations: Examinations (Exams): Reexaminations, and by individual Faculty regulations. Misrepresentation of Facts to gain a reexamination is a serious breach of the Code of Student Behaviour.

Other Policies

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.
Remote Teaching & Learning Appendix
Due to the COVID-19 pandemic, this course will be delivered remotely. Remote delivery is not the same as an online course that has been carefully designed from the ground up to be a fully integrated online experience. In being required to deliver this course remotely, some tradeoffs have been made to try to preserve the essential experience of the in-person course. Every effort has been made to provide a high-quality learning experience. Be aware, though, that circumstances may result in deviations from procedures in the Before Times. Your patience and understanding are appreciated.

To successfully participate in remote learning in this course, it is recommended that you have access to a computer with an internet connection that can support the tools and technologies the University uses to deliver content, engage with instructors, TAs, and fellow students, and facilitate assessment and examinations. Please refer to Technology for Remote Learning for details. If you encounter difficulty meeting the technology recommendations, please email the Dean of Students Office (dosdean@ualberta.ca) directly to explore options and support.

Please contact me by the add/drop date (May 13?) if you do not have access to the minimum technology recommended. I will try to make arrangements to accommodating those who contact me before this date. Failure to do so may result in a zero in any assessment that depends on the minimum technology.

Lectures
Although links to lecture videos will be posted throughout the semester on eClass, the videos themselves are hosted on YouTube. These videos are asynchronous; that is, they are not being run live at a specific day and time; this allows maximum flexibility to accommodate diverse situations (e.g., time zones, family obligations, work, etc.).

Office Hours
It will not be possible to have in-person office hours this term. Instead, you are encouraged to post general questions to the eClass discussion forum and ask personal questions via email. If there is enough interest, I may try holding sessions periodically via Google Chat, Google Meet, or Zoom.

Synchronous Activities
Students have the right to not participate in synchronous activities and may turn off their cameras and audio. It is recommended that students remove all identifiable and personal belongings from the space in which they will be participating. Synchronous activities will not be recorded/posted online.

Online Behaviour
Students from many different backgrounds participate in courses at the University of Alberta. Sexist, racist, homophobic comments and other inflammatory remarks are not conducive to learning in our courses, and absolutely are not permitted. All participants are governed by the Code of Student Behaviour. Be mindful when discussions involve controversial topics or issues, and consider the possibility that members of our community have themselves experienced some of these issues and/or very different realities because of these issues. Participate in a respectful and considered manner.

If you are witness to or the target of abusive or offensive behaviour in any course, please inform your instructor immediately. You may also contact the Psychology Undergraduate Advisor Kerry Ann Berrisford (psycscience@ualberta.ca), Associate Chair (Undergraduate) Cor Baerveldt (cor@ualberta.ca), or Chair Anthony Singhal (psych.chair@ualberta.ca).
Exams
You will write the exams remotely online synchronously (on a scheduled day and time) using exam integrity software (ExamLock) and proctoring software (Smart Exam Monitor); see below for technological requirements. While writing the online exams, you are **not** to refer to any notes, books, websites, people, or deities. Any use of these materials will be considered a violation of academic integrity, and will result in the matter being sent to the Associate Dean of Science (Undergraduate) and the academic discipline team. You should arrange for a place to write your exams without interruption. If you have concerns about the exam writing and/or proctoring process, please contact me as soon as possible (for example, if you have religious or other reasons that do not permit you to show your face).

If, for whatever reason, you begin the exam late you will not be given additional time. For example, if you start a 50-minute midterm 10 minutes after the scheduled starting time, you will only have 40 minutes to write the exam.

**ExamLock** is software that you download and run on your computer. It will prevent you from navigating away from the exam, and it will take screenshots of all your on-screen activity. System requirements for ExamLock are:

- ✔ macOS version 10.10 (Yosemite) or newer
- ❌ Mac computers running the Apple M1 CPU are **not** supported (please contact me)
- ✔ Windows 10
- ❌ iPads, tablets, and Chromebooks are **not** supported (please contact me)

**Smart Exam Monitor** is software that works with eClass; you do **not** have to download this to your computer. You are asked to share your screen, turn on your webcam and microphone (for the duration of the exam), show your ID, and show your face. System requirements for Smart Exam Monitor are:

- ✔ laptop, desktop, or Chromebook computer (phones, tablets, and iPads are not supported)
- ✔ operating system: macOS X, Windows, ChromeOS
- ✔ Google Chrome browser
- ✔ webcam
- ✔ microphone
- ✔ fully charged device and/or power supply

⚠️ It is important that you read the [information and privacy statement regarding remote exam proctoring](https://example.com).

If you have any technical questions, please contact eClass support at (780) 492-9372 or eclass@ualberta.ca.

**Student Resources**
Updates to university-related activities impacted by COVID-19 can be found on the [COVID-19 Information website](https://example.com).

General information about various services and resources for students, including academic, financial, health, safety, and career development, can be found on the website for [Current Students](https://example.com).