

PSYCHOLOGY 367(001): Sensory Systems, Term 1 2023W COURSE SYLLABUS

Calendar Description: Anatomy and physiology of the sensory pathways and their relation to perception. [3 credits]

Prerequisites: PSYC 101 and PSYC 102

Contacts

Instructor: Professor Hee-Yeon Im (she/her; First name pronounced: “hee-yon”)
email: heeyeon.im@ubc.ca
drop-in hours: Tuesdays, 12:45-1:45 pm, Kenny 2031

Teaching Assistants:	office hours	location
Akosua Asare	Wednesdays 3:30-4:30 pm	Kenny 4003
Alex Cook	Thursdays 1:00 – 2:00 pm	Kenny 3508
Zahra Kheradmandsaadi	Fridays 2:30-3:30 pm	Kenny 3508

We are easily reached through **Canvas** using **Piazza**. **All questions** about lecture material, readings and exam content should be posted **publicly** for the rest of the class to see; you may choose to remain anonymous to your classmates. Questions of a personal nature should be posted privately for only Dr. Im or the TAs to see. Please **sign up** at <https://piazza.com/ubc.ca/winterterm12023/c634>

Learning Activities and Materials

Lectures: Tuesdays & Thursdays, 11:00 am - 12:20 pm in BUCH A101

Textbook: *Sensation & Perception, 6th edition* (2021) by J. Wolfe, K. Kluender, D. Levi et al. (hardcover new ~\$270 or ebook ~\$85; [UBC Bookstore link here](#); 1 copy on 2-hour loan in Koerner Library Course Reserves; 1st [2006], 2nd [2009], 3rd [2012], 4th [2015], 5th [2018], and international editions are **NOT** suitable)

Learning Management System: canvas.ubc.ca
(to access: downloadable files [course syllabus, lecture outlines + learning outcomes, lecture slides]; textbook demonstrations; library course reserves [additional readings, textbook excerpts]; [Piazza](#) [peer, instructor & TA discussions]; grades)

Assessment of Learning:

Quizzes (Sept 26 ; Nov 7 ; Nov 28) [lowest mark dropped]	30%
Midterm Exam (Oct 19)	30%
Final Exam (Dec 11-22)	40%
<hr/>	
Total	100%
Human Subject Pool participation	3%

Course Details

Course Learning Outcomes: By the end of this course, you will be able to:

- distinguish among different methods for assessing sensory systems and sensations;
- describe sound, and connect our sense of hearing to the auditory system;
- understand the workings of the vestibular system that mediates spatial orientation;
- relate the somatosensory system to our sensations of touch and pain;
- describe light, and connect our sense of sight to the visual system;
- relate the olfactory system to our sense of smell;
- connect the gustatory system to our sense of taste;

as we explore these topics through lectures, readings, and in-class demonstrations.

Readings and Lectures: This course comprises in-person activities: this is the most effective way to engage in the demonstrations, group activities and discussions that will form a critical part of your learning in the course. All lectures will be given in person at the scheduled class time; they will not be live-streamed or recorded. A version of the lecture slides will be available on **Canvas (Modules)** the evening before each lecture to facilitate your preparation and note taking, and to help you catch up if you need to miss a class. Please note that some of the material covered in lectures is not in the textbook, and some of the material in the textbook will not be covered in lectures. Therefore, the textbook is required reading. An excerpt of textbook material that we anticipate will not be covered in lectures is available on **Canvas (Library)**. We recommend that you both attend lectures and read ahead in the textbook (see page 3). When it comes to the tests, you are responsible for **ALL** material covered in lectures and **ALL** material assigned from the textbook including figures, tables, and definitions.

Lecture and Textbook Learning Outcomes: Statements indicating what you should learn in the lectures and readings will be included on the first slide for each lecture and in the lecture outline, which will be available on **Canvas (Modules)** the evening before. These outcomes are to guide your studying and to make it unnecessary for you to ask us what you need to know for the tests. Many students choose to treat each outcome as a test question and attempt to answer it. We **strongly recommend** this method of studying, but we do not have a compiled list of correct answers. *You should be able to master the content in this course by attending lectures, completing the assigned reading, preparing answers to each lecture/textbook outcome and clarifying your answers by attending office hours or posting on Piazza. Also, the electronic version of the textbook includes practice test questions.*

Human Subject Pool (HSP) Participation: To learn more about psychology and earn up to 3 bonus points toward your course grade, you may participate in research projects between September 6 and December 7. The projects are posted at ubc-psych.sona-systems.com Please register in this online system by the end of September. You can earn your first ½ point by completing a pretesting survey that will make you eligible for a wider variety of studies. As an alternative to participating in studies, you may complete a library writing project which consists of reading and summarizing a research article from the journal *Psychological Science*. Each written summary counts as 1 hour of participation, and must be submitted using Turnitin (class ID is 40264948, class name is “HSP W1 2023-2024”, password is “Research”). More information on both research participation and the library option can be found at psych.ubc.ca/hsp. **Be sure to check your recorded bonus points for this course before the online system closes at the end of the term.** These points will be added to your final course grade, after any scaling that may be required (see page 5).

Lecture Schedule and Assigned Readings

Date	Topic	Reading
Sept 5	<i>No class: Imagine UBC Day</i>	
Sept 7	[1] Introduction; Psychophysics (classical)	Chpt. 1 (p. 3-10)
Sept 12	[2] Psychophysics (modern and scaling)	Chpt. 1 (p. 10-13); Chpt. 14 (p. 473-474)
Sept 14	[3] Psychophysics (signal detection)	Chpt. 1 (p. 13-16)
Sept 19	[4] Sensory neuroscience; Sound	Chpt. 1 (p. 16-31); Chpt. 9 (p. 273-277)
Sept 21	[5] The ear	Chpt. 9 (p. 277-286)
Sept 26	[6] Auditory nerve; Quiz 1 (Sept 7-21 material)	Chpt. 9 (p. 286-291)
Sept 28	[7] Auditory pathways; Loudness	Chpt. 9 (p. 291-295)
Oct 3	[8] Pitch; Hearing loss	Chpt. 9 (p. 296-303)
Oct 5	[9] Sound localization	Chpt. 10 (p. 305-319)
Oct 10	[10] Vestibular system	Chpt. 12 (p. 365-384)
Oct 12	<i>No class: "Make-up" Monday (you will go to your "Monday classes" instead)</i>	
Oct 17	[11] Somatosensory system	Chpt. 13 (p. 407-422)
Oct 19	Midterm exam (no lecture); Sept 7 – Oct 10 material	
Oct 24	[12] Touch; Pain (nociceptive)	Chpt. 13 (p. 422-425; 429-434)
Oct 26	[13] Pain (neuropathic); Light; The eye	Chpt. 13 (p. 425-429)*; Chpt. 2 (p. 33-36)
Oct 31	[14] Vision (optics)	Chpt. 2 (p. 37-39)
Nov 2	[15] Retina (anatomy)	Chpt. 2 (p. 39-44)
Nov 7	[16] Retina (physiology); Quiz 2 (Oct 17-Nov 2 material)	Chpt. 2 (p. 44-55)
Nov 9	[17] Visual acuity; Contrast sensitivity	Chpt. 3 (p. 57-68)
Nov 14	<i>No class: Midterm break</i>	
Nov 16	[18] Visual pathways	Chpt. 3 (p. 68-75)
Nov 21	[19] Visual cortex	Chpt. 3 (p. 75-81)
Nov 23	[20] Pattern analyzers	Chpt. 3 (p. 81-91)
Nov 28	[21] Olfactory system; Quiz 3 (Nov 7-23 material)	Chpt. 14 (p. 451-471)
Nov 30	[22] Smell sensation	Chpt. 14 (p. 472-493)
Dec 5	[23] Gustatory system	Chpt. 15 (p. 495-511)
Dec 7	[24] Taste sensation	Chpt. 15 (p. 511-522); Chpt. 1 (p. 12-13)
Dec 11-22	Final Exam (2.5 hours); Oct 17 – Dec 7 material	

* Additional reading: *Basbaum & Julius (2006)* - download from [Canvas \(Library tab\)](#)

Textbook demonstrations can be found through [Canvas \(Modules tab\)](#)

Chpts. 4-8, 11 and pages 320-333, 385-405, 435-449 will be covered in Psyc 368.

To avoid copyright and/or intellectual property infringements, photographing, screenshotting, video or audio recording of lectures/tests is not permitted at any time.

Course Policies

Learning Assessments: Your learning will be evaluated through individual quizzes and exams. All of these will be in person and on paper to promote academic honesty. The quizzes and midterm exam will occur during the scheduled class time (dates & topics – page 3). The final exam will occur during the formal exam period (Dec 11-22). Each quiz will consist of multiple-choice questions. Each exam will consist of multiple-choice and short-answer questions. The *Midterm exam* will include material tested on *Quiz 1*; the *Final exam* will include material tested on *Quiz 2* and *Quiz 3* but not material tested on *Quiz 1* or the *Midterm exam*.

Your test marks will be posted on **Canvas** as soon as they are available. Tests will not be returned to you, but you may review them with TAs during office hours. Dr. Im will review correct answers in class. You are expected to use the terminology introduced in this course in your written answers (with only minor deviations from correct spelling).

Accommodations: If you will be seeking accommodation through the *Centre for Accessibility*, please provide your accommodation letter to Dr. Im as soon as possible, and before the first quiz. If you anticipate a *religious or cultural observance* will conflict with a test, at least 2 weeks advance notice must be provided to Dr. Im in writing. If you have *conflicting responsibilities* that will interfere with your attendance in this course, please discuss this with Dr. Im as soon as possible and before the course withdrawal date (Sept 18); supporting documentation may be requested.

In-Term Academic Concession: One quiz may be missed without penalty or the need to report your absence. For all other absences from quizzes or the midterm exam you must request academic concession through self-reporting of conflicting responsibilities, medical circumstances or compassionate grounds (refer to the UBC calendar entry: www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0), and **let Dr. Im know**. The procedure for submitting request forms depends on your Faculty as follows:

Arts 1st request - download file from **Canvas (Modules)**; complete and email to Dr. Im

Arts 2nd request (online) - students.air.arts.ubc.ca/academic-concession-form/

Science – download file from **Canvas (Modules)**; complete and email to Dr. Im

Kinesiology (online) - kin.educ.ubc.ca/undergraduate/bkin/academic-concession/concession-itw/

Please do not take a test if you are unwell. **There will be no make-up quizzes or midterm exams.** Instead, if concession is granted, the final exam weighting will be changed to reflect the missed test. Unfortunately, concession will **not** be granted for: a test that you have already taken, absences due to travel or other social plans, test conflicts with other courses. If you request concession for more than 1 test, you will be referred to your Faculty advising office.

Final Exam Concession: If you are unable to write the final exam as scheduled, you must apply for deferred standing in the course through your Faculty academic advising office. If you are granted deferred standing (SD), you must write a make-up final exam at a later date. **Do not make December travel plans until the final exam schedule is released in October.**

Note: supplemental exams to improve your grade are not offered in any course in the Faculty of Arts.

Electronic Devices: Laptops and similar devices can be effective learning tools and are welcome in class. However, if you are using them for non-class-related activities it can be distracting for others, so please sit towards the back of the room. Cell phones should be kept in *silent mode* at all times and never answered during class; they must be stored during tests.

Departmental and University Policies and Acknowledgements

Scaling of Grades: In order to reduce grade inflation and maintain equity across multiple course sections, all psychology classes are required to comply with departmental norms regarding grade distributions. According to these norms, the mean grade in a 300-level class is 75 for a good class, 73 for an average class, and 71 for a weak class, with a standard deviation of 13. Scaling may be used in order to comply with these norms; grades may be scaled up or down as necessary by an instructor or the department. Grades are not official until they appear on a student's academic record. You will receive both a percent and a letter grade for this course. At UBC, they convert according to the key below:

A+	90-100%	B+	76-79%	C+	64-67%	D	50-54%
A	85-89%	B	72-75%	C	60-63%	F	0-49%
A-	80-84%	B-	68-71%	C-	55-59%		

Student Support: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment, discrimination and racism are not tolerated, nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on senate.ubc.ca/policies-resources-support-student-success. UBC's evolving anti-racism work is described at equity.ubc.ca/together-against-racism/

COVID-19 Safety: The wearing of masks is no longer required. Non-medical masks that cover our noses and mouths are a primary tool for combating the spread of COVID-19, and you are welcome to wear one in our classroom. **If you feel unwell** (complete a self-assessment here: <https://bc.thrive.health/covid19/en>) or if you have tested positive for COVID-19, **please stay home**. If you feel unwell on a test day, apply for in-term concession (for the midterm exam or if you have already missed a quiz) and email Dr. Im ahead of time. To prepare for possibly needing to miss a class due to illness, we suggest you make a connection early in the term to another student or a group of students in the class. You can help each other by sharing notes. If you don't yet know anyone in the class, you can use Piazza to connect with other students. You can always come to office hours for extra assistance. Your teaching team will not come to class if they are unwell. Should Dr. Im need to stay home, you will be notified through a Canvas announcement; the lecture will be given during class time on Zoom if possible, otherwise a recording will be posted on Canvas.

Acknowledgements: The land on which our class will be meeting is the traditional, ancestral, and unceded territory of the Musqueam people. Dr. Im lives and works on the traditional territories of the Musqueam, Squamish and Tsleil-Waututh peoples. The Canvas course entitled [Respect, Sincerity & Responsibility](#) is a good place to start learning about respectful engagement with Indigenous communities.

Please help us to maintain a safe and respectful environment.

Academic Integrity

Welcome to the academic community. As part of this community, you are expected to act honestly and ethically in all of your academic activities, just like the rest of us. In Psyc 367 that means doing your own work, avoiding collusion, not using aids that have been excluded by the examiner, not sharing material

provided for you to use in this course, and acknowledging the ideas of others (more details on each of these below).

Make sure you understand UBC's definitions of [academic misconduct](#), [consequences](#), as well as expectations about [academic honesty](#). *Please ask if you're not sure how these apply to our course.* While you're checking out the calendar, you should also remind yourself about the "[Student Declaration and Responsibility](#)" statement you agreed to when you registered.

DO your own work. All individual work that you submit should be completed by you and submitted by you. All assessments are designed to help you learn about Sensory Systems. It is *unacceptable* to misrepresent your identity by using someone else to complete any portion of this course (e.g., comment on Piazza, complete a test question). It is *unacceptable* to buy/sell/swap/share test questions or answers on any platform. It is *unacceptable* to help someone else cheat.

AVOID collusion. Collusion is a form of academic integrity violation that involves working too closely together without authorization. The resulting submitted work gains unfair advantage over other students because it is a measurement of the groups' understanding rather than the individual's understanding. Studying together does not count as collusion, but working together to write answers or answering someone else's question is considered to be collusion. You are expected to take tests on your own without any type of assistance.

DO NOT use aids that have been excluded by the examiner. Unless otherwise explicitly specified, all tests in Psyc 367 will be closed book. This means you may not use notes, lecture slides, books, calculators, websites, etc. to look up answers to test questions.

DO NOT share materials provided for you to use in this course. We are working hard to provide all the materials you need to succeed in this course. In return, please respect our work. All test questions and answers, Piazza posts, announcements, lecture slides and outlines, Canvas modules, and any other materials provided to you by Dr. Im and the TAs or in the textbook and other readings are for use in this course by students currently enrolled in PSYC 367. It is *unacceptable* to share any of these materials beyond our course, including by posting on file-sharing websites (e.g., CourseHero, GoogleDocs). It is *unacceptable* to copy and paste sentences from the textbook (e.g., definitions) into for-profit software (e.g., Quizlet) for use in studying. Please respect our intellectual property, and follow copyright law.

DO acknowledge the ideas of others. Scholars build on the work of others, and give credit accordingly—this is a quality of strong academic writing. As an example, most of these academic integrity principles were adapted from material prepared by Dr. Catherine Rawn. Psyc 367 will not have a writing component outside of exams, but appropriate citing of sources will be important in Psyc 368 next term.