

# COURSE SYLLABUS

## PSYC\_V 367-001: Sensory Systems, Term 1 2024W

Welcome to PSYC 367. I'm excited to teach you as much as I possibly can about your sensory systems! Please call me Debbie, Dr. Giaschi (pronounced 'Jawski') or Dr. G.

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

**Prerequisites:** PSYC 101/NSCI 201 or COGS 200  
(credit will be granted for only one of PSYC 367 or BIOL 372)

### Contacts

**Instructor:** Professor Deborah Giaschi (she/her)

email: [deborah.giaschi@ubc.ca](mailto:deborah.giaschi@ubc.ca)

phone: (604)875-2345x7807

drop-in hours: Tuesdays, 12:45 - 2:00 pm, room Kenny 4218

Teaching Assistants:	office hours	location
<b>Akosua Asare</b> (she/her)	Mondays 3 – 4 pm Fridays 10 – 11 am	Kenny 4003 <b>Canvas</b> (zoom)
<b>Alex Cook</b> (he/him)	Thursdays 1 – 2 pm	Kenny 3508
<b>Bella Yang</b> (she/her)	Piazza only	

We encourage you to take advantage of our office hours to ask clarification questions about course content and to discuss your progress in the course. We are also 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 me and/or the TAs to see. We will respond to all posts, usually within 24 hours. Cut-off for teaching team responses to test preparation posts is 9 pm the day before each test. Please **sign up** at [https://piazza.com/ubc.ca/winterterm12024/psyc\\_v3670012024w1](https://piazza.com/ubc.ca/winterterm12024/psyc_v3670012024w1)

### 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.

(through [UBC Bookstore](#): hardcover new \$287.99 or ebook 180-day rental \$85.50; through [vital source](#): e-book 1-year rental \$98.07 or purchase \$130.75; 1 copy on 2-hour loan in Koerner Library Course Reserves; 1<sup>st</sup> [2006], 2<sup>nd</sup> [2009], 3<sup>rd</sup> [2012], 4<sup>th</sup> [2015], 5<sup>th</sup> [2018], and international editions are missing important details that have been added to the 6<sup>th</sup> edition)

**Learning Management System:** [canvas.ubc.ca](https://canvas.ubc.ca)

(to access: downloadable files [course syllabus, lecture outlines + learning outcomes, lecture slides]; library course reserves [supplementary readings, textbook excerpts]; **Piazza** [peer, instructor & TA discussions]; grades)

### Assessment of Learning:

Quizzes (Sept 24; Oct 31; Nov 21) [lowest mark dropped]	30%
Midterm Exam (Oct 15)	30%
Final Exam (TBA: Dec 10-21)	40%
<b>Total</b>	<b>100%</b>
Human Subject Pool participation	3%

## PSYC\_V 367-001: Sensory Systems

### 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 I anticipate will not be covered in lectures is available on **Canvas** (*Library*). I 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. I **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 learning outcome and clarifying your answers by attending office hours and/or posting questions on Piazza.* Also, the electronic version of the textbook includes practice test questions.

**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 10-21). 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. I 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).

## PSYC\_V 367-001: Sensory Systems

### Lecture Schedule and Assigned Readings

Date	Topic	Reading
Sept 3	Imagine UBC Day (no class)	
1. 5	Introduction; Psychophysics (classical)	Chpt 1 (p. 3-10)
2. 10	Psychophysics (modern; Weber & Fechner)	Chpt 14 (p. 473-474) <sup>#</sup>
3. 12	Psychophysics (scaling; signal detection)	Chpt 1 (p. 10-16)
4. 17	Sensory neuroscience; Sound	Chpt 1 (p. 16-31); Chpt 9 (p. 273-277)
5. 19	The ear	Chpt 9 (p. 277-286)
6. 24	Auditory nerve; <b>Quiz 1</b> (Sept 5-19 material)	Chpt 9 (p. 286-291)
7. 26	Sound encoding; Auditory pathways	Chpt 9 (p. 291-293)
8. Oct 1	Loudness & Pitch	Chpt 9 (p. 294-297)
9. 3	Hearing loss; Sound localization (time & level)	Chpt 9 (p. 297-303); Chpt 10 (p. 305-311)
10. 8	Sound localization (other cues); Vestibular sense	Chpt 10 (p. 311-319); Chpt 12 (p. 365-384)
11. 10	Somatosensory system	Chpt 13 (p. 407-422)
	15 <b>Midterm exam</b> (no lecture)	<b>Sept 5 – Oct 8 material</b>
12. 17	Touch; Pain (nociceptive)	Chpt 13 (p. 422-425; 429-434)
13. 22	Pain (neuropathic); Light; The eye	Chpt 13 (p. 425-429)*; Chpt 2 (p. 33-37)
14. 24	Vision (optics)	Chpt 2 (p. 37-39)
15. 29	Retina (anatomy)	Chpt 2 (p. 39-44)
16. 31	Retina (photoreceptors); <b>Quiz 2</b> (Oct 10-29 material)	Chpt 2 (p. 47-49)
17. Nov 5	Retina (information processing)	Chpt 2 (p. 44-47; 49-55)
18. 7	Visual acuity; Contrast sensitivity	Chpt 3 (p. 57-67)
	12 Midterm break (no class)	
19. 14	Visual pathways	Chpt 3 (p. 67-75)
20. 19	Visual cortex	Chpt 3 (p. 75-81)
21. 21	Pattern analyzers; <b>Quiz 3</b> (Oct 31-Nov 19 material)	Chpt 3 (p. 81-91)
22. 26	Olfactory system	Chpt 14 (p. 451-471)
23. 28	Smell sensation	Chpt 14 (p. 472-493)
24. Dec 3	Gustatory system	Chpt 15 (p. 495-511)
25. 5	Taste sensation	Chpt 15 (p. 511-522); Chpt 1 (p. 12-13)
<b>10-21 Final Exam (2.5 hours)</b>		<b>Oct 10 – Dec 5 material</b>

<sup>#</sup> supplementary reading: *Cornsweet (1962)* - download from [Canvas \(Library\)](#)

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

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

**Cancelled classes:** If I am unable to attend class in person due to illness etc., I will post a **Canvas** announcement. Please adjust your notification settings to receive immediate announcements (go to Account → Notifications → Announcements → Notify me right away). I will give the lecture during class time on Zoom, if possible, otherwise a recording will be posted on **Canvas** at a later date

## PSYC\_V 367-001: Sensory Systems Course Policies

**Accommodations:** If you will be seeking accommodation through the *Centre for Accessibility*, please provide your accommodation letter to me as soon as possible, and before the first quiz. If you anticipate a *religious or cultural observance* will conflict with a test, please let me know in writing at least 2 weeks before the test. If you have *conflicting responsibilities* that will interfere with your course attendance, please discuss this with me as soon as possible and before the withdrawal date (Sept 16); 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, please 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](http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0)); additional documentation is not required. The procedure for submitting request forms depends on your Faculty as follows:

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

*Arts 2nd request* (online) - [students.air.arts.ubc.ca/academic-concession-form/](http://students.air.arts.ubc.ca/academic-concession-form/)

*Science* – download file from **Canvas** (*Modules*); complete and email to me

*Kinesiology* (online) - [https://ubc.ca1.qualtrics.com/jfe/form/SV\\_8AlfBlwtsZBKnoe](https://ubc.ca1.qualtrics.com/jfe/form/SV_8AlfBlwtsZBKnoe)

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, I will refer you 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 advising office. If you are granted deferred standing (SD), you will need to 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.**

**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.

**Land Acknowledgement:** The land on which our class will be meeting is the traditional, ancestral, and unceded territory of the Musqueam people. I live and work on the traditional territories of the Musqueam, Squamish and Tsleil-Waututh peoples. Please consider the **Canvas** course entitled [Respect, Sincerity & Responsibility](#) if you would like to learn about respectful engagement with Indigenous communities.

**Equity, Diversity and Inclusion:** I will work to create a learning environment that welcomes, listens to, and respects students of all identities, inclusive of race, gender, sexuality, age, or ability. I am mindful of my position as a cisgender white woman and the privilege this has afforded me throughout my education and academic career. If you feel that any class content is inappropriate or makes you feel uncomfortable, I would encourage you to talk to me or one of the TAs. If you feel that your performance in this class is being impacted by circumstances from outside of class, please talk to me. Please honour the diversity of your classmates and help us to maintain a safe and respectful environment for all in the classroom, during office hours and on **Piazza**.

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

## PSYC\_V 367-001: Sensory Systems

### **Human Subject Pool (HSP) Participation**

As part of this course, you are invited to earn up to **3 bonus points** (referred to as credits below). Most students will choose to earn these credits by spending **3 hours participating in psychology studies (1 credit per hour)** through the Department of Psychology's Human Subject Pool (HSP) system. You can locate, create an account, and sign up for studies by going to <https://hsp.psych.ubc.ca>. Please register in the system by the **end of the first month of classes** to have the opportunity to earn your first ½ hour credit with a brief online survey that will increase your eligibility for more studies. Once registered in the system, you will be able to browse through and select which studies you wish to participate in, sign up for an available timeslot, and confirm your accumulated credits afterward. At the end of the day on **Dec 6, the subject pool will close**, and you will no longer be able to receive credits. I strongly urge you to participate in and confirm your credits long *before* the last week of class since many studies will not offer timeslots near the end of the term and you may be locked out before allocating your credits to your desired course. Further instruction can be found at <https://psych.ubc.ca/undergraduate/opportunities/human-subject-pool/> in the document entitled "Subject Pool Information for Participants." Students are free to receive their HSP bonus credits from any combination of "in-lab" and "online" studies. However, "in-lab" studies will offer an extra 0.5 credits (e.g., a 1 hour "in-lab" study will award 1.5 credits, while an equivalent "online" study will award 1 credit).

As an alternative to participation in psychology subject pool experiments, you may complete a library-writing project. Such projects consist of reading and summarizing 1) the research question, 2) the methods and 3) the results (in written form) of a research article from the peer reviewed journal *Psychological Science*. You will receive one (1) research participation credit for each article summary that meets the following requirements:

- The article must have been published in the journal titled "*Psychological Science*"
- The article must have a publication date from the year 2000 to present (i.e. papers from 2001 are acceptable; those from 1999 or earlier are not)
- The article must be a research article; it cannot be a review article, a news item, a notice, or a letter to the editor, for example
- The summary should be approximately 500 words in length
- You must include your name, student number, course, section, instructor and email address on each summary
- You must log on to the Human Subject Pool (HSP) system (<http://hsp.psych.ubc.ca/>) and create an account before submitting your article summaries. Your credit is assigned using the online system.

For each course, you may obtain the same number of extra credits via the library option as specified in the course syllabus (i.e. the same number of credits available for students who participate in research). Summaries must be submitted **no later than 10 days before the end of classes**. You are to submit your article and your summary to turnitin.com. If you don't have a turnitin account already (from a previous course), you will need to create a user account in Turnitin. For the library assignment the **class ID is 45334826, class name is "HSP 2024-2025 W1" and password is "Research"**. See [www.turnitin.com](http://www.turnitin.com), and click on the "Training" link at the top of the page for detailed instructions on how to submit papers to Turnitin.

**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 6).

## PSYC\_V 367-001: Sensory Systems

### *Departmental and University Policies and Acknowledgements*

**Scaling of Grades:** In the Psychology Department, we aim to offer learning experiences that welcome and challenge all students to engage meaningfully in our discipline. We strive for grades that accurately reflect student learning and achievement of course learning outcomes, rather than solely reflecting their performance relative to others. The Psychology Department employs department-wide grading standards to promote equitable alignment, supporting students and course instructors as they learn and teach across many diverse courses and sections. In Intermediate 300-level courses, instructors should aim for a grade average in the following Target Range (before any bonus HSP points are added): **B (72-75%)**. Ranges are intended to provide some flexibility to instructors and account for differences that can occur between classes. During the course, instructors may choose to adjust grades and/or difficulty of the assessments, to align with the Target Range. At the end of the course, if the average falls outside the Target Range (either direction), instructors will typically be expected to use a linear transformation to adjust final grades (i.e., add or subtract the same number of points to all students' marks, while ensuring no student fails the course due to this transformation).

If a course mean falls in a letter grade band above the Target Range (e.g., in the B+ range for Intermediate courses), and the instructor believes these grades to be justified, the instructor may submit a justification request using the departmental approval final grades submission form, and the grades may stand. This Upper Range is intended to inspire further excellence in learning and teaching, and allow for the possibility that some classes select for higher performing students. Courses with means exceeding the Upper Range will be expected to provide justification as well as use a linear transformation to fall within the Upper Range.

Grades are not official until they appear on students' academic record. Students 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%		

**Note: supplemental exams to improve your grade are not offered in any course in the Department of Psychology.**

**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](https://senate.ubc.ca/policies-resources-support-student-success). UBC's evolving anti-racism work is described at [equity.ubc.ca/together-against-racism/](https://equity.ubc.ca/together-against-racism/)

## PSYC\_V 367-001: Sensory Systems

### 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 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., [Piazza](#) comment, 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 me or the TAs, or in the textbook and other readings, are for use in this course by students currently enrolled. 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, unless you choose the library option for HSP credits. Any student who is suspected of plagiarism in their HSP submission will, at a minimum, not be granted credit, and their course instructor will be notified.

In all cases of suspected academic misconduct the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript.