### COURSE SYLLABUS

**PSYCHOLOGY 367(001): Sensory Systems, Term 1 2021W**

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

**Prerequisites:** Psyc 101 and Psyc 102

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### Contacts

**Instructor:** Professor Debbie Giaschi  
*email:* giaschi@mail.ubc.ca  
*phone:* (604)875-2345x7807  
*office hours:* Tues. 3:30-4:30 pm; *Zoom via Canvas* until further notice

**Teaching Assistants:**
- **Akosua Asare**  
  *office hours:* Mon. 3-4 pm  
  *location:* *Zoom via Canvas*
- **Nicolai Blasdel**  
  *office hours:* Wed. 9:45-10:45 am  
  *location:* TBA
- **Alex Cook**  
  *office hours:* Fri. 1-2 pm  
  *location:* *Zoom via Canvas*
- **Zahra Kheradmandsaadi**  
  *office hours:* Thurs. 2-3 pm  
  *location:* *Zoom via Canvas*

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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. Giaschi or the TAs to see. Please [sign up at piazza.com/ubc.ca/winterterm12021/psyc3670012021w](piazza.com/ubc.ca/winterterm12021/psyc3670012021w)

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### Learning Activities and Materials

**Lectures:** Tues. & Thurs. 11:00 am - 12:20 pm in BUCH A101

(hardcover new ~$213 or 180-day ebook rental ~$75 [shop.bookstore.ubc.ca/courselistbuilder.aspx]; 12-month ebook rental ~$90 [vitalsource.com/en-ca/products/sensation-and-perception-jeremy-wolfe-keith-kluender-v9780197542705]; 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](https://canvas.ubc.ca)  
(to access: downloadable files [course syllabus, lecture outlines + objectives, lecture slides]; *Panopto* [live-streamed & recorded lectures]; textbook demonstrations; library course reserves; *Piazza* [peer, instructor & TA discussions]; *Zoom* [office hours]; grades)

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### Assessment of Learning:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1 (Sept 28)</td>
<td>30%</td>
</tr>
<tr>
<td>Quiz 2 (Oct 19)</td>
<td>30%</td>
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<tr>
<td>Quiz 3 (Nov 23)</td>
<td>30%</td>
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<tr>
<td>Midterm Exam (Nov 2)</td>
<td>30%</td>
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<tr>
<td>Final Exam (Dec 11-22)</td>
<td>40%</td>
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</tbody>
</table>

**Total**  
100%

**Human Subject Pool participation**  
3%

**Note:** supplemental exams to improve your grade are not offered in any course in the Faculty of Arts.
Course Learning Outcomes: This course will provide you detailed knowledge about
- methods for assessing sensory systems and sensations;
- sound, the auditory system, and hearing;
- the vestibular system and spatial orientation;
- the somatosensory system, touch, and pain;
- light, the visual system, and seeing;
- the olfactory system and smell;
- the gustatory system and taste;
through lectures, readings, and demonstrations.

Readings and Lectures: All lectures will be given in person at the scheduled class time.
Lectures will be live streamed in webinar format (no live discussion) to allow you to watch from
home on Canvas (Modules [Panopto]). Lecture recordings will be available for viewing on
Canvas (Modules [Panopto]) after class, assuming no technical glitches occur. Recordings are
not meant to replace in-person lectures, but they will allow you to keep up with the class
material if you need to be absent for a few lectures. Students will not appear in these
recordings unless they stand/walk behind the lecture podium. A version of the lecture slides
will be available on Canvas (Modules) the evening before each lecture to facilitate your
preparation and note taking, but these slides may not be identical to the ones shown in class.
In addition, 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. It is recommended that you both
attend/watch 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. The textbook is required reading.

Lecture Objectives: 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 objectives 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 objective as a test question and attempt to answer it. We
recommend this method of studying, but we do not have a list of correct answers.

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 7 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 31445496, class name is “HSP 2021-2022 (Fall Term 1), password is “Research”).
More information on both research participation and the library option can be found at
psych.ubc.ca/undergraduate/human-subject-pool/. 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.
# PSYCHOLOGY 367(001): Sensory Systems

## Lecture Schedule and Assigned Readings

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 7</td>
<td>Imagine UBC Day (no class)</td>
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</tr>
<tr>
<td>1. 9</td>
<td>Introduction; Psychophysics (classical)</td>
<td>Chpt 1 (p. 3-10)</td>
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<tr>
<td>2. 14</td>
<td>Psychophysics (modern and scaling)</td>
<td>Chpt 1 (p. 10-13); Chpt 14 (p. 473-474)</td>
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<tr>
<td>3. 16</td>
<td>Psychophysics (signal detection)</td>
<td>Chpt 1 (p. 13-24)</td>
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<tr>
<td>4. 21</td>
<td>Sensory neuroscience; Sound</td>
<td>Chpt 1 (p. 24-31); Chpt 9 (p. 273-277)</td>
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<tr>
<td>5. 23</td>
<td>The ear</td>
<td>Chpt 9 (p. 277-286)</td>
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<tr>
<td>6. 28</td>
<td>Auditory nerve; <strong>Quiz 1</strong> (Sept 9-23 material)</td>
<td>Chpt 9 (p. 286-291)</td>
</tr>
<tr>
<td>7. Oct 5</td>
<td>Auditory pathways; Loudness</td>
<td>Chpt 9 (p. 291-295)</td>
</tr>
<tr>
<td>8. 7</td>
<td>Pitch; Hearing Loss</td>
<td>Chpt 9 (p. 296-303)</td>
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<tr>
<td>9. 12</td>
<td>Sound localization</td>
<td>Chpt 10 (p. 305-319)</td>
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<tr>
<td>10. 14</td>
<td>Vestibular system</td>
<td>Chpt 12 (p. 365-384)</td>
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<tr>
<td>11. 19</td>
<td>Somatosensation; <strong>Quiz 2</strong> (Sept 28 -Oct 14 material)</td>
<td>Chpt 13 (p. 407-416)</td>
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<tr>
<td>12. 21</td>
<td>Somatosensory pathways; Touch</td>
<td>Chpt 13 (p. 416-422; 429-434)</td>
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<tr>
<td>13. 26</td>
<td>Pain</td>
<td>Chpt 13 (p. 422-429)*</td>
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<tr>
<td>14. 28</td>
<td>Light; The eye</td>
<td>Chpt 2 (p. 33-39)</td>
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<tr>
<td>Nov 2</td>
<td>Midterm exam (no lecture)</td>
<td><strong>Sept 9 – Oct 28 material</strong></td>
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<tr>
<td>15. 4</td>
<td>Retina</td>
<td>Chpt 2 (p. 39-55)</td>
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<tr>
<td>16. 9</td>
<td>Visual acuity; Contrast sensitivity</td>
<td>Chpt 3 (p. 57-68)</td>
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<tr>
<td>11</td>
<td>Remembrance Day (no class)</td>
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<tr>
<td>17. 16</td>
<td>Visual pathways</td>
<td>Chpt 3 (p. 68-75)</td>
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<tr>
<td>18. 18</td>
<td>Visual cortex</td>
<td>Chpt 3 (p. 75-81)</td>
</tr>
<tr>
<td>19. 23</td>
<td>Pattern analyzers; <strong>Quiz 3</strong> (Nov 4-18 material)</td>
<td>Chpt 3 (p. 81-91)</td>
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<tr>
<td>20. 25</td>
<td>Olfactory system</td>
<td>Chpt 14 (p. 452-471)</td>
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<tr>
<td>21. 30</td>
<td>Smell sensation</td>
<td>Chpt 14 (p. 472-493)</td>
</tr>
<tr>
<td>22. Dec 2</td>
<td>Gustatory system</td>
<td>Chpt 15 (p. 495-511)</td>
</tr>
<tr>
<td>23. 7</td>
<td>Taste sensation</td>
<td>Chpt 15 (p. 511-522)</td>
</tr>
</tbody>
</table>

**11-22 Final Exam (2.5 hours)** **Sept 9 – Dec 7 material**

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

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

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, or sharing of Panopto recordings is not permitted at any time.**

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version September 7, 2021
Tests: All tests will be in person to promote academic honesty and to provide closer-to-normal learning assessments; there will be no option for online tests. 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 and Quiz 2; the Final exam will be cumulative and cover the entire course. Students are expected to use the terminology (and correct spelling) introduced in this course in their answers.

Marks will be posted on Canvas as soon as they are available. Tests will not be returned to you. Correct answers will be reviewed in class, but this part of the lecture will not be live-streamed or recorded. Incorrect answers may be reviewed with TAs during office hours.

Accommodations: If you will be seeking accommodation through the Centre for Accessibility, please provide your accommodation letter to Dr. Giaschi 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. Giaschi in writing. If you have conflicting responsibilities that will interfere with your attendance in this course, please discuss this with Dr. Giaschi as soon as possible and before the course drop date (Sept 20); supporting documentation may be requested. If you are an international student who will be arriving after the start of term, but before Sept 20, please inform Dr. Giaschi. If you cannot attend class by Sept 21, you should talk to your Faculty advising office.

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. Giaschi know. The procedure for submitting request forms depends on your Faculty as follows:
Arts 1st request (to Dr. Giaschi) - Student-Self-Declaration-Form-1.6-Arts.pdf
Arts 2nd request (online) - students.air.arts.ubc.ca/academic-concession-form/
Science (to Dr. G.) - Template - In-Term Academic Concessions Self Declaration, 2019.pdf
Kinesiology (online) - kin.educ.ubc.ca/undergraduate/bkin/academic-concession/concession-itw/

You should not take a test when 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. Concession will not be granted for: a test that you have already taken, absences due to travel or other social plans or 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.

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.
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. However, in the spirit of flexibility and compassion in light of COVID-19 and the associated return to in-person teaching, those departmental norms have been adjusted upwards by 5% for 2021W. According to these adjusted 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>90-100%</td>
</tr>
<tr>
<td>A</td>
<td>85-89%</td>
</tr>
<tr>
<td>A-</td>
<td>80-84%</td>
</tr>
<tr>
<td>B+</td>
<td>76-79%</td>
</tr>
<tr>
<td>B</td>
<td>72-75%</td>
</tr>
<tr>
<td>B-</td>
<td>68-71%</td>
</tr>
<tr>
<td>C+</td>
<td>64-67%</td>
</tr>
<tr>
<td>C</td>
<td>60-63%</td>
</tr>
<tr>
<td>C-</td>
<td>55-59%</td>
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<tr>
<td>D</td>
<td>50-54%</td>
</tr>
<tr>
<td>F</td>
<td>0-49%</td>
</tr>
</tbody>
</table>

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: You are required by provincial mandate to wear a non-medical mask during our class meetings, for your own protection and for the safety and comfort of everyone else in the class. Non-medical masks that cover our noses and mouths are a primary tool for combating the spread of COVID-19. If you come to class without a mask, you will be asked to put on a mask or leave. Masks are available throughout Buchanan including Arts Advising. If you wish to request an exemption to the indoor mask mandate it must be based on one of the grounds for exemption detailed in the PHO Order on Face Coverings (COVID-19). Such requests must be made through the Center for Accessibility (info.accessibility@ubc.ca). If you’ve been approved for a mask exemption or are waiting for a decision on your request, you are welcome in class but please inform Dr. Giaschi by email before attending class. Instructors have permission from the Provincial Health Officer to remove masks while teaching if they can stay 2m away from students. Please refrain from eating during class; please keep your mask on between sips if you are drinking fluids.

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 and watch the live-streamed lectures or lecture recordings. If you feel unwell on a test day, apply for in-term concession and email Dr. Giaschi ahead of time. Your teaching team will not come to class if they are unwell. Should Dr. Giaschi 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.

Please help us to maintain a safe and respectful environment.
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, audio/video recordings, Canvas modules, and any other materials provided to you by Dr. Giaschi 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.

Acknowledgements: The land on which our class will be meeting is the traditional, ancestral, and unceded territory of the Musqueam people. Dr. Giaschi 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.