

**COURSE SYLLABUS**  
**PSYCHOLOGY 367(001): Sensory Systems**  
**Term 1, 2019W**

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

**Prerequisites:** Psyc 101 and Psyc 102

**Instructor: Dr. Debbie Giaschi**    *office:* Kenny 3531                      *phone:* 875-2345x7807  
*hours:* Tuesdays & some Thursdays 12:30 – 1:30 pm

**Teaching Assistants:**

	<b>Lexis Kepler</b>	<b>Jill Dosso</b>	<b>Michelle Lei</b>
<i>office:</i>	Kenny 3525	Kenny 3010	Kenny 3504
<i>hours:</i>	Monday, 9:30-10:30am	Thursday, 9:45-10:45 am	Wednesday, 9:15-10:15am

*We are also easily reached through Canvas using Piazza. All questions about lecture material and exams should be posted publicly, either anonymously or with your name attached, for the rest of the class to see. Questions of a personal nature should be posted privately (but not anonymously) for only Dr. Giaschi to see. Please sign up at [piazza.com/ubc.ca/winterterm12019/psyc367001](https://piazza.com/ubc.ca/winterterm12019/psyc367001)*

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

**Textbook:** *Sensation & Perception, 5th edition* (2018) by J. Wolfe, K. Kluender, D. Levi et al. (hardcover ~\$200 new <https://shop.bookstore.ubc.ca/courselistbuilder.aspx>; ebook rental or loose-leaf~\$100; 1 copy on 2-hour reserve in Koerner Library; 1<sup>st</sup> [2006], 2<sup>nd</sup> [2009], 3<sup>rd</sup> [2012] and 4<sup>th</sup> [2015] editions are not suitable)

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

(for access to: course syllabus, lecture outlines, lecture objectives, lecture slides, textbook demonstrations, additional readings, *Piazza*, grades)

**Assessment of Learning**

Quiz 1 ( <i>Sept 24</i> ) or Quiz 2 ( <i>Oct 29</i> ) [highest mark]	<b>10%</b>
Midterm Exam 1 ( <i>Oct 8</i> )	<b>30%</b>
Midterm Exam 2 ( <i>Nov 12</i> )	<b>30%</b>
<u>Final Exam (<i>Dec 3-18</i>)</u>	<u><b>30%</b></u>
<b>Total</b>	<b>100%</b>
Human Subject Pool participation	<b>3%</b>

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

## PSYCHOLOGY 367(001): Sensory Systems

**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 in-class demonstrations.

**Readings and Lectures:** Some of the material covered in class is not in the textbook, and some of the material in the textbook will not be covered in class. In addition, not everything covered in class will be in the lecture slides. It is, therefore, essential that you both attend class and read ahead in the textbook (see Schedule on page 5). A version of the slides will be available on *Canvas (Modules)* at least the evening before each lecture. These are provided as a courtesy to facilitate your note taking, but they may not be identical to the ones shown in class. If you do have to miss a class, you are responsible for getting notes from another student. When it comes to the quizzes and exams, you are responsible for ALL material covered in class and ALL material assigned from the textbook including figures, definitions, boxes and summaries.

**Lecture Objectives:** Statements indicating what you should get out of each lecture and the 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 exams. Many students choose to treat each objective as an exam question and attempt to answer it. We recommend this method of studying, but we do not have a list of correct answers.

**Tests:** Each quiz will consist of multiple-choice questions. Each exam will consist of multiple-choice and short-answer questions. *Midterm exam 1* will include material tested on *Quiz 1*; *Midterm exam 2* will include material tested on *Quiz 2*, but not material on *Quiz 1* or *Midterm exam 1*. The *Final exam* will be cumulative and cover the entire course. Quizzes and exams will not be returned to students, although they may be viewed during the TAs' office hours. Grades will be posted on *Canvas* as soon as they are available. Correct answers will be reviewed in class; photographing of test material is not permitted.

## PSYCHOLOGY 367(001): Sensory Systems

**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 4 and November 29. The projects are posted at [ubc-psych.sona-systems.com](http://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. In a given term, you may earn no more than 1 point for online studies (not including pretesting). 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. More information on both research participation and the library option can be found at [psych.ubc.ca/undergraduate/human-subject-pool/](http://psych.ubc.ca/undergraduate/human-subject-pool/). **Be sure to check your recorded bonus points for this course at the end of the term.** These points will be added to your final course grade, after any scaling that may be required.

**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 observance* will conflict with a quiz or exam, 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; supporting documentation may be requested.

**Missed Tests:** One quiz may be missed without penalty or the need to report your absence. All other absences from quizzes or exams will require a written request for academic concession to Dr. Giaschi ([giaschi@mail.ubc.ca](mailto:giaschi@mail.ubc.ca)) BEFORE missing the test, using the form available on *Canvas*. If you need to miss a test due to conflicting responsibilities, medical circumstances or compassionate grounds, please refer to the new UBC calendar entry: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0> In some situations, such as the first occurrence of an acute illness likely to be quickly resolved without seeing a health professional or for the first request on compassionate grounds, a self-declaration to Dr. Giaschi will suffice. In other situations, such as conflicting responsibilities or subsequent requests based on acute illness or compassionate grounds, supporting documentation may be requested and Dr. Giaschi may refer you to your academic advising office.

**There will be no make-up quizzes or make-up midterm exams. Instead if concession is granted, the final exam weighting will be changed to reflect the missed test. If you miss the final exam, a make-up exam must be written; you will also need to apply for deferred standing in the course through your faculty academic advising office.** *Note: Dr. Giaschi will not grant concession for a test that you have already written, or for absences due to travel or other social plans.*

## PSYCHOLOGY 367(001): Sensory Systems

### ***University, Departmental and Course Policies:***

**Overview:** 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 and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious 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 <https://senate.ubc.ca/policies-resources-support-student-success>

**Academic misconduct:** The UBC Calendar defines cheating as “*dishonest or attempted dishonest conduct at tests or examinations, in which use is made of books, notes, diagrams or other aids excluded by the examiner. It includes communicating with others, copying from the work of others and purposely exposing information to other students who are taking the test or exam.*” Plagiarism is “*the presentation or submission of the work of another person, without citation or credits, as the student’s own work*”.

Cheating, plagiarism and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. The Department has implemented software that can reliably detect cheating on multiple-choice exams by analyzing the patterns of students’ responses. 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 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. All work in this course, unless otherwise specified, is to be original work done independently by individuals.

For details on pertinent University policies and procedures, please see the Campus-wide Policies and Regulations section of the Vancouver Academic Calendar ([www.calendar.ubc.ca/](http://www.calendar.ubc.ca/)).

**Scaling of grades:** In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the mean grade in a 300-level class is 70 for a good class, 68 for an average class, and 66 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 the professor or department at the end of the course.

**Copyright:** All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of Dr. Giaschi or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline. *Video or audio recording of lectures is not permitted.*

**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, if you plan to use devices for any non-class-related activities, 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 quizzes and exams.

# PSYCHOLOGY 367(001): Sensory Systems

## Lecture Schedule and Assigned Readings 2019W

Date	Topic	Reading
Sept 3	Imagine UBC Day (no class)	
1. 5	Introduction; Psychophysics (classical)	Chpt 1 (p. 2-10)
2. 10	Psychophysics (modern and scaling)	Chpt 1 (p. 10-13); Chpt 14 (p. 486)
3. 12	Psychophysics (signal detection)	Chpt 1 (p. 13-17)
4. 17	Sensory neuroscience; Sound	Chpt 1 (p. 17-33); Chpt 9 (p. 282-287)
5. 19	The ear	Chpt 9 (p. 287-296)
6. 24	<b>Quiz 1</b> (Sept 5-19 material); Auditory nerve	Chpt 9 (p. 296-300)
7. 26	Auditory pathways; Loudness	Chpt 9 (p. 300-305)
8. Oct 1	Pitch; Hearing loss	Chpt 9 (p. 306-313)
9. 3	Sound localization	Chpt 10 (p. 314-329)
8	<b>Midterm exam 1</b> (Sept 5-Oct 3 material)	
10. 10	Vestibular system	Chpt 12 (p. 378-398)
11. 15	Somatosensory system	Chpt 13 (p. 420-436)
12. 17	Touch and pain sensation	Chpt 13 (p. 436-446); <i>Basbaum</i>
13. 22	Light; The eyeball	Chpt 2 (p. 34-38)
14. 24	Optics; Retina overview	Chpt 2 (p. 38-46)
15. 29	<b>Quiz 2</b> (Oct 10-24 material); Photoreceptors	Chpt 2 (p. 46-51)
16. 31	Retinal neurons	Chpt 2 (p. 52-58)
17. Nov 5	Visual acuity; Contrast sensitivity	Chpt 3 (p. 60-72)
18. 7	Visual pathways	Chpt 3 (p. 72-82)
12	<b>Midterm exam 2</b> (Oct 10 – Nov 7 material)	
19. 14	Visual cortex	Chpt 3 (p. 82-96)
20. 19	Olfactory system	Chpt 14 (p. 462-484)
21. 21	Smell sensation	Chpt 14 (p. 484-506)
22. 26	Gustatory system	Chpt 15 (p. 508-525)
23. 28	Taste sensation	Chpt 15 (p. 525-537)
Dec 3-18	<b>Final Exam</b> (2.5 hours)	<b>Sept 5 - Nov 28 material</b>

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The *Basbaum & Julius* (2006) article can be downloaded from *Canvas* (Oct 17 Module).

Textbook demonstrations can be found through *Canvas* (Modules) or at <https://oup-arc.com/access/sensation-and-perception-5e-student-resources>.

Chpts 4-8, 11 and pages 330-345, 399-419, 447-459 will be covered in Psyc 368.