
Introduction to Sensation and Perception (PSY 352)

Professor Heide Island, Office: Carnegie 305
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Office Hrs: T/Th., 9:30–11:15 am and by appointment



Course Information

Lecture Class: Tues/Thurs., 7:55 – 9:30, Carnegie 306
Laboratory Class: Wed., 7:30 – 9:05, Carnegie 306

Teaching Assistant: Emma Ferns
Email: ferns@pacificu.edu

Course Description

Sensation and Perception is the study of how our sensory experience (e.g., vision, taste, smell, hearing, and touch) is translated into a perceptual representation of the world via the central nervous system. Virtually all knowledge of the sensory system is the result of investigation into our nonhuman relatives physiological functioning; therefore this course integrates both human and nonhuman animal comparative sensory structure and neuroanatomy. The goals of this course are to provide students with the skills and opportunities to conceptually integrate structure and function of the nervous system in an applied way; to further their empirical writing skills, and to explore neuroscience through both a lecture, lab and discussion format.

Pre-requisite: Successful completion of PSY 150: Introductory Psychology with a C or better or permission by the instructor. You are encouraged to completed PSY 252, Introduction to Neuroscience prior to this course to complete the Neuroscience Emphasis (i.e., PSY 252, Introduction to Clinical and Behavioral Neuroscience; PSY 352, Sensation and Perception; PSY 452, Behavioral and Clinical Endocrinology or PSY 420, Psychopharmacology).

Required Materials

Required Books

Bear, M. F., Connors, B. W., & Paradiso, M. A. (2015). Neuroscience: Exploring the Brain, Fourth Edition. Philadelphia, PA: Lippincott, Williams, & Wilkins. ISBN: 0-7817-6003-8 (Earlier editions are fine)

American Psychological Association (2009). Publication Manual of the American Psychological Association, 6th Edition, Spiral Binding. Washington, D.C.: APA. ISBN: 1557988102

Required Materials

Standard Dissection Kit (see Pacific University Bookstore)

Required Software

Microsoft Word is installed on all public-use computers at Pacific, this is considered standard professional software. Word (not Pages) is required for all of your reports whether on your personal computer or through those available to you through Pacific. **Because Google Drive and Pages often reformats documents and uses a different reviewer mode than Word, reports drafted on this software will be returned ungraded.**

Student Learning Outcomes

If you put in the time to attend class and the laboratory, you complete the readings, study a minimum of 5 hours/week outside of class and apply yourself in the laboratory reports, you will:

- recognize the major issues within the discipline of sensation and perception.
- explain and identify all sensory systems, their function and associated structures.
- demonstrate mastery in the neuroanatomy of perceptual experience
- evaluate sensory and perceptual dysfunction through clinical cases.
- develop evidence-based writing skills.
- write papers using American Psychological Association manuscript style.

Lecture Section Structure

Sensation and Perception is considered challenging; expect to work hard in this course. Physiological psychology is the platform upon which all other psychology courses will build. This class will move fast; therefore, falling behind on attendance or the reading is ill advised. You can expect to read *roughly* 40+ pages each week for successful completion of this course. It is also important to note that I may not discuss everything from the text during lecture; but you will still be responsible for that material. Further, I may provide supplementary reading for labs; this will not be included with the syllabus. You will need to download the articles from Moodle or be in class to receive the hard copies.

Exams

There are three semester exams as well as a pre-assessment and a post-assessment (i.e., cumulative final exam). Your exam grade is based on your **HIGHEST** three exam scores. There are 77 points possible on each exam but your score is based on 75 points; this provides a point cushion in the event that you misinterpret a question. Assuming all questions are clear, you can earn 2 extra points on each exam or flub two questions without harm to your grade (this is the **ONLY** bonus point opportunities I provide). The typical exam covers 4-5 chapters of material. **NOTE:** You must take both the pre-assessment and the cumulative post-assessment exams, as I use this as an assessment of your learning and in part, my teaching efficacy. Failure to attend either examination will result in an incomplete for the course; however, the pre-assessment is not graded and the post-assessment will only count toward your final grade if it is **HIGHER** than your lowest exam score.

Scholarship Points

Your education does not start and stop in the classroom. Therefore, you are expected to participate in one hour (2 pts.) of scholarship outside of the class (1 pt./half hour). Scholarship points may include research participation (Participation evidence is the research receipt) or attendance at a lecture related to the course outside of our class (Involvement evidence is your ticket and a signature from the presenter). Failure to complete these two activities will result in an incomplete (I) for the course. If points are not made-up within the year, you will receive a letter grade demotion on your transcript.

Laboratory Section Structure

This is a laboratory-based course, thus there is three-hour lab every Wednesday. **You are expected to ATTEND all laboratory sessions.** If you miss two labs over the course of the semester it will result in a grade reduction by one letter. More than two and you will receive an F for the course and must retake both the lecture and laboratory section another semester. Part of the reason for this, is that most all research is collaborative, as such, this class is as well; therefore your attendance is **CRITICAL** as a responsible member to your group. It is also important that you join a group with complementary schedules. You will, at times, meet with your group outside of class to conduct research, please be aware of this early on. Given you will be part of a team, failing to attend lab demonstrates a lack of commitment and responsibility to your team and the course, **YOU WILL BE EVALUATED BY YOUR PEERS** at the end of the semester for a grade.

Teaching Assistants

The teaching assistant, Emma Ferns is a psychology major, who excelled in the Behavioral Neuroscience sequence. She will help you conceptualize the material, APA Style (for your lab write-up), answer questions, and facilitate study sessions. Your TA is **NOT** available to provide you with class notes. Should you choose to attend her study sessions or office hours, please be prepared, ask questions and take advantage of her knowledge and expertise.

Laboratory Reports

This is a laboratory-based course, thus you are expected to **ATTEND all laboratories (“labs”)**. Truancy of more than one lab over the course of the semester will result in a **grade reduction**. More than two lab trancies and **you will receive an F for the course**. There are seven 25-point laboratory write-ups over the course of the semester. All laboratory write-ups must be **typed** with **grammatically correct** sentences and in manuscript style outlined by the American Psychological Association Style Guide (i.e., **APA format**). Do

not simply guess at APA format, it is a highly specific, definitive manuscript format; you will need to follow the formatting example from your style manual (see pages 41-60 for examples). I have also included an example on Moodle and will provide an introduction to APA and laboratory writing during the first laboratory session of the semester.

Submitting Your Laboratory Report

- 1.) save your write-up as a Word document and name it "YOUR LAST NAME-LAB #.doc" (e.g., ISLAND-LAB. 1)
- 2.) email the laboratory report as an attachment to your assigned TA, no later than the Wednesday, 5 pm due date. Revisions are due by 5 p.m. the following day, Thursday.
- 3.) when you receive a return email from your TA, it will indicate EITHER that:
 - a.) the report was written in correct APA style and will be sent on to me to grade, or
 - b.) that it was not in correct APA style and WILL NOT BE SENT ON TO ME UNTIL CORRECTED!
- 4.) if you receive an email indicating that the report needs APA corrections, then you **must attend the TA or my office hours for APA clarification** before you can resubmit the report.
- 5.) you will have a turn around time of one-day for your "second chance," to resubmit the corrected write-up to your TA (or me), or you will receive a zero for the report.

The revision option is a courtesy to you in place of simply earning a failing mark for a poor initial laboratory report. Please use some introspection, if you receive an email suggestion you get help, you NEED IT. Do not waste Michelle or my time by persisting in making the same mistakes when simply coming in for clarification could resolve the confusion. APA is highly specific but easy to learn, half of the effort should be editing your writing.

Grading Rubric

Assessment Material	Poss. Pts	Your Pts	Rubric
3 Exams (75 pts ea) + Pre/Post Exams	225		A/- = 400 - 358
7 Labs (25 pts ea)	175		B +/- = 357 - 318
2 Scholarship Activities (1 hr), Complete/Incomplete	C/I		C +/- = 317 - 278
TOTAL POINTS	400		D +/- = 277 - 238
			F = 237 - 0

Exam and Laboratory Deadlines

Exam Dates	Email First Draft to Emma (Wed. by noon)	Email Emma Final Draft (Friday by 5)
Thurs., 23 – Feb., Exam 1	Feb. 9: Write-up 1 – Reflex Arc	September 12
Thurs., 23 – March, Exam 2	Feb. 16: Write-up 2 – Dissection	September 26
Thurs., 09 – May., Exam 3	Oct. 08: Write-up 3 – Case Report	October 10
Wed., 10 – May, Brain Drain	Oct. 22: Write-up 4 – Sleep Debt	October 24
Wed., 16 – May Final Exam	Nov. 5: Write-up 5 – EEG	November 7
	Nov. 12: Write-up 6 – Neuropsych. Assessment I	November 14
	Nov. 19: Write-up 7 – Neuropsych. Assessment II	November 21

University Policies

Classroom Behavior

From the Pacific University Faculty Handbook (Section 4.1.3)

Students should be free to take reasoned exception to the data or views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they enroll. Students should have protection through orderly procedures against prejudiced or capricious academic evaluation. At the same time, students are responsible for maintaining standards of academic performance established for each course in which they enroll. Students must also recognize that, as members of a community of learners, they have an obligation to be responsible members of that community, and that the exercise of their freedom of expression does not impinge upon the rights of others in their quest for learning.

Accommodated Learners

If you have documented challenges that will impede your learning in any way, please contact EDNA GEHRING the Director of LSS at ext.2107 or gehringe@pacificu.edu The Director will meet with students, review the documentation of their disabilities, and discuss the services that Pacific offers and any ADA accommodations for specific courses.

Tutoring and Learning Center (TLC)

If you need more writing assistance in addition to the help provided by your professor and the teaching assistants, please take advantage of the TLC in Scott Hall 127. The center focuses on delivering one-on-one and group tutoring services for math and science courses and writing skills in all subjects.

Useful S & P Weblinks

Writing essays and in APA format	http://depts.washington.edu/psywc/handouts.shtml
Cranial Quiz	http://www.gwc.maricopa.edu/class/bio201/cn/cranial.htmAn
Internet Medical Reference	http://www.webmd.com/
The Brain from the Bottom Up	http://thebrain.mcgill.ca/flash/index_a.html
Sensation and Perception Tutorials	http://psych.hanover.edu/KRANTZ/sen_tut.html
Sensation and Perception Links	http://psych.athabascau.ca/html/aupr/sensation.shtml
The Whole Brain Atlas	http://www.med.harvard.edu/AANLIB/home.html
Blindspot Demonstration	http://serendip.brynmawr.edu/bb/blindspot1.html
Perception Laboratory	http://www.skidmore.edu/~hfoley/perception.htm
Sensation and Perception Jeopardy	http://www.uni.edu/walsh/jeopardy.html
Visual Perception	http://www.aber.ac.uk/media/Modules/MC10220/visindex.html
Optics and Visual Perception	http://mysite.du.edu/~jcalvert/optics/ophom.htm
Visual Illusions Gallery	http://dragon.uml.edu/psych/illusion.html
Optical Illusions	http://www.michaelbach.de/ot/
Auditory Perception Links	http://www.ipsych.com/aud/level_2_aud.html
Anatomy of the Ear	http://www.wisc-online.com/objects/index_tj.asp?objID=AP1502
Signal Detection Theory Demo	http://wise.cgu.edu/sdtmod/index.asp
Signal Detection Theory	http://www.cns.nyu.edu/~david/handouts/sdt/sdt.html

FLEXIBLE COURSE CALENDAR

WEEK	LECTURE	LAB	READING
WEEK 1 Jan. 31 – Feb. 2	Syllabus, Pre-test, Introduction to the S & P	Lab 1: Cranial Nerve Demonstration Film: <i>Secrets of the Mind</i>	Bear, Ch. 9 Pp. 277-308
WEEK 2 Feb. 7 - 9	Vision: Sensation	Lab 2: Eye Dissection and Human Vision <i>Due: Lab 1 - Nerve Battery Write-Up</i>	Bear, Ch. 9 Pp. 277-308, Article 1
WEEK 3 Feb. 14 - 16	Ocular Disorders, Perceiving Objects Perceiving Objects and Scenes	Film: <i>The Island of the Colorblind</i> <i>Due: Lab 2 – Eye/Vision Write-Up</i>	Bear, Ch. 10 Pp. 309-341, Article 2
WEEK 4 Feb. 21 – 23	Perceiving Objects and Scenes ●*EXAM 1 (Ch. 9, 10, Article 1 & 2)●*	Film: <i>The Ragin' Cajun (Usher's)</i>	Bear, Ch. 10 Pp. 309-341, Article 3
WEEK 5 Feb. 28 – Mar. 2	Visual Perception – Attention Visual Perception – Perceiving Motion	Film: <i>Stranger in the Mirror</i>	Bear, Ch. 10 Pp. 309-341, Article 4
WEEK 6 Mar. 7 – 9	Visual Perception – Perceiving Color Visual Perception – Depth and Size	Film: <i>The Mind's Eye (from Health Prof. Library)</i>	Bear, Ch. 10 Pp. 309-341, Article 5
WEEK 7 Mar. 14 – 16	Sound – The Auditory System Sound – Pitch Perception	Lab 3: Otoscope –Ear Anatomy Film: <i>The Body Story, Hearing</i>	Bear, Ch. 11 Pp. 343-386, Article 6
WEEK 8 Mar. 21 – 23	Music Perception and Cutaneous Senses ●*EXAM 2 (Ch. 10, 11, Articles 3-6)●*	Lab 4: Somatosensation Distribute: Tee-Shirts	Bear, Ch. 12 Pp. 387-422, Article 7
WEEK 9 Mar. 28 – 30	Spring Break No Classes		
WEEK 10 Apr. 4 – 6	Cutaneous Senses	Cutaneous Senses Exercise /Film <i>Due: Lab 3 – Ear Anatomy Write-Up</i>	Bear, Ch. 12 Pp. 387-422, Article 8
WEEK 11 April 11 – 13	Cutaneous Senses Chemical Senses: Olfaction	Lab 5: The Stinky Shirt; Film: Mysteries of Smell <i>Due: Lab 4 - Somatosensation Write-Up</i>	Bear, Ch. 12 Pp. 387-422, Article 9
WEEK 12 April 18 – 20	Chemical Senses: Olfaction Chemical Senses: Gustation	Lab 6: Super-Taster Exercise <i>Due: Lab 5 – Stinky Shirt Write-Up</i>	Bear, Ch. 8 Pp. 251-275, Article 10
WEEK 13 April 25 & 27	Chemical Senses: Gustation Film: Taste Perception	April 26: Senior Projects Day No Lab	Bear, Ch. 8 Pp. 251-275, Article 11
WEEK 14 May 2 – 4	Synesthesia Synesthesia Film, Evaluations	No Wed lab, meet on Sat. at Cacao <i>Due: Lab 6 – Super-Taster Write-Up</i>	Bear, Ch. 8 Pp. 251-275, Article 12

Sat. May 6	Lab 7: Chocolate Tasting – An exercise in Synesthesia		
	Leave Campus at 8:00 am for 9:00 am appointment at Cacao		
WEEK 15 May 9	●*EXAM 3●* (Ch. 12, 8, Articles 7-12)	May 6: Reading Day	
WEEK 16 Tues., May 16	●*FINAL EXAM - Cumulative●*	Due: Lab 7 – Synesthesia Write-Up	Carnegie 306 12 – 2:30 pm

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COURSE CONTACT OF UNDERSTANDING

I, _____ (PRINT YOUR NAME) hereby acknowledge that I have received a copy of the Introduction to Neuroscience course (PSY 252) syllabus for spring 2017. I have read the syllabus and I understand the course policies and requirements. I recognize that it is my responsibility to seek clarification regarding any aspect of the syllabus, the course requirements, the lab submission policy, attendance, or any other element of the grading policies if they are unclear to me.

SIGN YOUR NAME

DATE

PRINT YOUR NAME

Meaningful Information for the Course

What's your major? _____

Minor? _____

What is your end game plan (i.e., what career goals do you hope to achieve when you complete college)?

What area(s) of biopsychology/neuroscience do you find most interesting?

Why?

What do you expect from this course?

What are your concerns regarding this course?

How can I help you overcome these?

Have you recently experienced an injury?

Is yes, does the injury affect your attention, learning, comfort? If so, how?

How many hours outside of class and lab do you believe it will take to succeed in this course?

What grade do you expect to earn from this course? A/A- B+/B/B- C+/C/C-

What is your behavioral plan to achieve this grade (if you don't have one, please consider visiting with me during office hours)?