



Psychology 438 – Sensory Perception

Summer 2012

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Office Hours	Tuesdays 2:00p.m. – 3:00p.m. Wednesdays 2:30p.m. – 3:30p.m.

Mondays, Tuesdays, Wednesdays, & Thursdays 4:00p.m. – 5:50p.m. (107 Esslinger Hall)

OVERVIEW OF COURSE STRUCTURE

Course Objectives: At the end of this course, you should have a solid understanding of the ways in which humans and many animals use our sensory systems to perceive the world and the ways in which these phenomena are studied in psychology. Further, you should be able to read a description of research in perception and be able to identify the discipline (visual, auditory, etc.) as well as obtain a basic understanding of the research question.

Course Description: In this course, we will examine the subjective perceptual universe of the human brain as derived from our physical senses, including vision, hearing, and touch. Toward this end, we will include discussion of the methods used by scientists to examine perceptual abilities, the capabilities and limitations of perception, current knowledge of the underlying neural bases of perception, and brain damage that may affect perception.

Perception involves the transformation of incoming signals into useful information or "representations" of the world. While perception seems automatic and effortless, it is really a complicated constructive process. The goal of the course is to understand some of the processes involved in this construction. The modern day study of perception is an interdisciplinary pursuit that includes studies of behavior, the brain, and computers. This course deals with all three types of studies with an emphasis on the first two. Thus, throughout the course we will contrast objective stimulus with subjective percept to provide perspective on the active and embodied nature of the perceptual world. It is my hope that by the end of this course, you will have a new appreciation for how you experience the world on a daily basis.

Course Design: The course promotes active learning — through discussion, solving problems, texts, papers, presentations, and movies. The instructors and TA are guides, cheerleaders, and coaches. The course encourages teamwork among students and instructor. Although Exams are to be completed individually, students are encouraged to work together on homework mini-quizzes as well as study groups for Exams.

Course Format: The material in this course will be presented through a combination of assigned reading from the text, class lectures, in-class discussion, and demonstrations. Lecture material and readings may overlap in material, but will not be replications of each other; some lecture material will not be covered in the readings and

vice versa. You are expected to do the assigned reading *before* the class period in which it is due. Reading the material before the corresponding lectures will help your performance in two ways. First, discussions of the material during lecture will be more fruitful if you have at least a general understanding of the material beforehand, helping you to ultimately comprehend and retain the material. Second, questions drawn from the assigned readings will be included on the regularly scheduled Exams, *even if they have not yet been discussed in lecture.*

COURSE REQUIREMENTS

1. Participation. Participation includes in-class group activities, assigned participation assignments, and unannounced mini-review-quizzes. Participation points will NOT be based on whether or not you got the correct answer, but on whether you tried. There are no make-up opportunities for participation points.

2. Homework. There will be 4 homework assignments during this course (one per week). The homework assignments will be in the form of online mini-quizzes taken on Blackboard (these are different from the in-class mini-review-quizzes, which will be taken for participation points). You will be given 5 attempts at each homework quiz, and feedback for the homework quizzes will be given in class the following day. ***Quizzes will only be available until 11:59p.m. the DAY THEY ARE DUE!!! This means that there will be no late homework quizzes accepted.***

3. Paper. You have to write a short one page -single spaced- paper on one of the psychological perception phenomena discussed in this course. You may reference the textbooks, lectures, the virtual lab, and/or peer reviewed articles. More information on this will be given in class.

4. Exams. You will have at least 50 minutes to complete each Exam, be on time!!! Exams will cover all material since the previous Exam and might include multiple choice, fill-in-the-blank, true/false, and/or short answer questions. Exams are closed book, closed note, and are completed individually. On Exam days, we will have a 50-minute lecture ***Prior*** to the Exam, followed by a 5-minute break, after which the Exam will commence. You may leave after you complete your Exam, but if you leave the room ***For Any Other Reason*** (bathroom, etc. you must ***Bring me you Exam First***). In addition, you may not leave until after you have turned in your Exam following its completion. **Absolutely no texting or other use of electronic devices during scheduled Exam time is permitted.**

At the end of the term, ***you will have the option of taking a “comprehensive make-up Exam”, which will replace the lowest of your 4 Exam scores. Therefore, if you miss an Exam (and have a score of 0 for that Exam), the makeup Exam can be used to replace that. This is the only option for making up missed Exams – no exceptions!*** On the final day of lecture, you will have 50 minutes to complete Exam 4, followed by 50 minutes to complete the make-up Exam.

5. Books. The required text is *Sensation and Perception (with Virtual Lab Manual CD-ROM)*, 8th Edition (Goldstein, 2010). There is a website, which accompanies this textbook:

http://www.wadsworth.com/cgi-wadsworth/course_products_wp.pl?fid=M20b&product_isbn_issn=9780495601494&token=

It is free to register and includes essay questions, practice quizzes, flashcards, crossword puzzles, learning objectives, etc. ***I STRONGLY recommend using this resource to help you prepare for quizzes.***

Read assigned chapters **before** class and do the “review” sections in the book as you encounter them. **Reread** if you encounter trouble on a “review” section.

COLLABORATION

Collaborative Learning: Discussing homework with other students and your instructor is encouraged, as are homework and study groups for quizzes and exams. Talking over the problems and reworking them when you discover that others got different answers promotes deeper understanding of concepts. ***However, each student must submit a separate homework.*** More explicitly, you may work together to solve problems and check your answers on homework with each other, but preparing those answers for your homework and the actual writing of any verbal answers need to be done independently.

Individual Work (when Collaboration = Cheating):

Your work on the quizzes must be your own. Any verbal statements on homework MUST be written in YOUR OWN WORDS. If you are caught cheating, the following consequences apply:

Cheating on Homework:

First offense: “0” on homework assignment and homework will be counted as not turned in

Second Offense: An “F” in the course. Infraction will be reported to the Office of Student Conduct and Community Standards.

Cheating on a Quiz:

An “F” in the course. Infraction will be reported to the Office of Student Conduct and Community Standards

The University may impose additional penalties in accordance with the student conduct code:

<http://uodos.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/Default.aspx>

SPECIAL NEEDS

Students with Disabilities: If you have a documented disability and may need accommodations, contact us ASAP. ***There is no way we can help you if you come to us with a documented disability at the end of the term. In addition, please let us know in advance even if you are not sure that your disability will require accommodation*** (for example, if you have a physical disability that may require you to miss class, but you aren’t sure it will). Students who are experiencing learning difficulties are encouraged to consult Disabilities Services (164 Oregon Hall; 346-1155; <http://ds.uoregon.edu/>).

Student Athletes: *You must let me know during the first week of classes* if you will miss class due to travel with a UO athletic team and require accommodation. ***Requirements for the course will not be relaxed*** for student athletes, however ***minor scheduling accommodations may be made (e.g., taking a quiz a few hours early) if planned well ahead of time.***

Other Students: If you are repeating this class, or have other circumstances that might affect your ability to devote time to the class, please let us know now so we can discuss strategies to promote your success in this course. If you wait until you have problems in the course, it may be too late to salvage your grade, but planning ahead will likely lead to success.

GRADING

Your ***final course grade*** is based on the following components:

120 points	(60%)	Score on 4 Exams worth 30 points each (there will be one comprehensive make-up Exam at the end of the term if you would like to replace your lowest Exam score or make-up a missed Exam)
60 points	(30%)	Score on 4 homework assignments worth points 15 each
10 points	(05%)	Participation in in-class exercises, attendance, and assigned participation work
10 points	(05%)	Reaction Paper on a perception phenomenon of your choice so long as it is covered or referenced in this course

Final grades will be based on the percentage of total possible points earned, distributed as follows:

	B+ 88.00–89.99%	C+ 78.00–79.99%	D+ 68.00–69.99%	Pass/No Pass:
A 93.00–100%	B 83.00–87.99%	C 73.00–77.99%	D 63.00–67.99%	P: 70.00% and up
A- 90– 92.99%	B- 80.00–82.99%	C- 70.00–72.99%	D- 50.00–62.99%	N: 69.99% or lower

Extra Credit. You can earn up to 10 points of extra credit (added to your final score) by participating in up to 2 hours of ongoing experimental research in the Psychology Department and writing a short 1 paragraph summary of the study or by writing a short 2 page paper on a research article of your choice (article must be approved by instructor prior to assignment submission).

COURSE SCHEDULE

**Schedule, homework due dates and Exam dates subject to change*

Date	Topic	Readings	Exams/HW/Recommended Lab
Week 1			
6/25 Mon	Course Introduction History of Inquiry into Perception	Ch. 1	Chapter 1 Lab: The Method of Limits
6/26 Tues	Physiological Basis of Perception: Neural Processing Introduction & Methods I The Anatomy & Physiology of Vision	Ch. 2-3	Chapter 2 Lab: Structure of Neuron Chapter 3 Lab: The Human Eye
6/27 Wed	Neural Processing II The Anatomy and Physiology of Vision	Ch. 4	Chapter 4 Lab: Visual Cortex of the Cat HW 1 Available
6/28 Thurs	Color Vision Exam 1: Second Half	Ch. 9	Chapter 9 Lab: Color Mixing <i>Exam 1</i>
6/29 Fri	No Class		HW 1 Due 11:59p.m.
Week 2			
7/2 Mon	Perceiving Brightness and Contrast Perceiving Objects and Scenes	Ch. 5	Chapter 5 Lab: Ambiguous Reversible Cube
7/3 Tues	Perceiving Depth & Size 3D Shape, Depth, & Space Perception	Ch. 10	Chapter 10 Lab: Depth Perception
7/4 Wed	4 th of July No Class		HW 2 Available

COURSE SCHEDULE CONTINUED

Date	Topic	Readings	Exams/HW/Recommended Lab
Week 2			
7/5 Thurs	Perceiving Movement Motion Perception & Action Exam 2: Second Half	Ch. 7-8	Chapter 8 Lab: Motion Capture <i>Exam 2</i>
7/6 Fri	No Class		HW 2 Due 11:59p.m.
Week 3			
7/9 Mon	Clinical Aspects of Vision		
7/10 Tues	Animal Vision Visual Illusions		
7/11 Wed	Hearing/Audition: Sound, The Auditory System, Localization, & Pitch Test Review	Ch. 11-12	Chapter 11 Lab: Tone Height and Tone Chroma HW 3 Available
7/12 Thurs	The Auditory Scene Exam 3: Second Half	Ch. 12	Chapter 12 Lab: Effect of Repetition on Grouping by Pitch <i>Exam 3</i>
7/13 Fri	No Class		HW 3 Due 11:59p.m.
Week 4			
7/16 Mon	Hearing: Speech Perception	Ch. 13	Chapter 13 Lab: Phantom Words
7/17 Tues	Cutaneous Senses Somatosensation	Ch. 14	Chapter 14 Lab: ABC Video: Children & Chronic Pain

COURSE SCHEDULE CONTINUED

Date	Topic	Readings	Exams/HW/Recommended Lab
Week 4			
7/18 Wed	Chemical Senses	Ch. 15	Chapter 15 Lab: ABC Video: The Sense of Smell HW 4 Available
7/19 Thurs	Exam 4: First Half Comprehensive Make-Up Exam: Second Half		<i>Exam 4</i> <i>Make-Up Exam</i>
7/20 Fri	No Class		HW 4 Due 11:59p.m. Reaction Paper Due 11:59p.m.